CITIZENS ADVISORY COMMITTEE
AGENDA
August 27, 2008; 6:30 – 8:00 p.m.
McCloskey Room

I. Call to Order

II. Approval of Minutes:
A. June 25, 2008

III. Communications from the Chair

IV. Reports from Officers and/or Committees

V. Reports from the MPO Staff
A. 4th Quarter Progress Report
B. Annual Completion Report
C. SR 45 from Pete Ellis to Russell Road Public Hearing Request

VI. Old Business
A. Complete Streets Policy

VII. New Business
A. JARC/New Freedom Grant Requests
Recommendation Requested
B. Intelligent Transportation System (ITS) Architecture
Recommendation Requested
C. Transportation Improvement Program FY 2009-2012 Amendment
1. SR 45 Intersection Improvement at Liberty Dr. (INDOT)
Recommendation Requested
D. Highway Safety Improvement Program (HSIP) Procedures
Recommendation Requested

VIII. Communications from Committee Members
A. Long Range Transportation Plan Vision Statement Discussion
B. Topic Suggestions for future agendas

IX. Upcoming Meetings
A. Policy Committee – September 12, 2008 at 1:30pm (McCloskey Room)
B. Citizens Advisory Committee – September 24, 2008 at 6:30pm (McCloskey Room)
C. Technical Advisory Committee – September 26, 2008 at 1:30pm (McCloskey Room)

Adjournment

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Citizens Advisory Committee Meeting Minutes
June 25, 2008 McCloskey Conference Room 135, City Hall

Citizens Advisory Committee (CAC) Minutes are transcribed in a summarized outline manner. Audio recordings from the meeting are available in the Planning Department for full reference.

Attendance

Citizens Advisory Committee (Voting Members): Chair Jack Baker (McDoel Gardens NA), John Kehrberg (Citizen), David Walter (6th & Ritter NA), Jerry Stasny (Old Northeast NA), Ted Miller (citizen), Natalie Wrubel (League of Women Voters), Steve Forrest (full-time citizen), Sarah Ryterband (Prospect Hill NA), and Elizabeth Cox-Ash (McDoel Gardens NA).

Others In Attendance (including Non-Voting CAC Members): Eve Corrigan (Citizen), and Scott Robinson (MPO staff).

I. Call to Order (~6:35PM)

II. Approval of Minutes

The minutes from the May 28, 2008 meeting were accepted by the CAC with one correction noted by Mr. Forest.

III. Communications from the Chair

A. SR 45/46 Bypass Project

Mr. Baker reported that the Policy Committee discussed the project and that there is a need to get the right people together to agree on a resolution. Currently there is not much to report on for the status of this project. The City's Public Works Department is putting together a list of items that should be addressed. He also mentioned the Policy Committee discussed the status of the state's TIP (INSTIP) and that Bloomington Transit is seeking to acquire the Royal Dog site (3rd and Walnut) for the new transit transfer facility.

IV. Reports from the Officers and/or Committees

None

V. Reports from the MPO Staff

A. Transportation Improvement Program FY 2009-2012

Mr. Robinson informed the CAC that the Policy Committee adopted the TIP at their June Meeting. He thanked everyone for their participation in the TIP process and also noted that Joe Fish, MPO Staff, was attending TransCAD training at Purdue. There was some discussion regarding the status of current road projects.

VII. Old Business

A. Ball State University Student Project

Mr. Robinson said that staff will need to provide a recommendation to Mr. Truex very soon if the project is to be considered this fall. Mr. Baker reviewed the list of suggestions that he has received thus far and then asked the committee for further suggestions. The

committee discussed the suggestions. A motion was made by Mrs. Cox-Ash that selected the West Second (Walnut to SR 37) Street Visioning and the Allen Street Bike and Pedestrian Corridor/Safe to School/Complete Streets. Mr. Miller seconded and the committee unanimously approved. Mr. Baker suggested that he meet with MPO staff to refine the suggestions before staff submits the proposals to the Ball State program. The committee was open to any suggestions that Mr. Truex would have on the projects.

B. Complete Streets Policy

Mr. Robinson reviewed the latest draft of the Complete Streets Policy and suggested that the committee reach consensus or preliminary approval up to section two, the policy section. This way the committee can focus their future efforts on the remaining sections. Mr. Baker supported the suggestion and asked for the Committee's opinion before moving forward. Discussion ensued over the suggestion and the language to use. Ms. Ryterband, Mr. Forest, and Mr. Miller were ok with a preliminary approval up to section two (Policy) of the draft. Ms. Ryterband moved that the draft policy be preliminary approved through section one and was seconded by Mr. Forest. Consensus was reached by the committee with preliminary approval of these sections. Discussion continued on the remaining sections of the draft policy by the committee. Mr. Baker said he would work with staff to flesh out the ideas that were conveyed by the committee members and would present these changes at the August meeting.

VI. New Business

None

VIII. Communications from Committee Members

A. Topic Suggestions for future agendas

Mr. Forest provided a topic suggestion that was included in the packet and would like everyone to consider this for the next meeting regarding long range vision statement.

VI. Upcoming Meetings

A. *CANCELLED* Technical Advisory Committee – June 27, 2008 at 1:30 p.m.
B. Technical Advisory Committee – August 22, 2008 at 1:30 p.m. (McCloskey Room)
C. Citizens Advisory Committee – August 27, 2008 at 6:30 p.m. (McCloskey Room)
D. Policy Committee – September 12, 2008 at 1:30 p.m. (McCloskey Room)

Adjournment (~8:10 PM)

These minutes were _____ by the CAC at their regular meeting held on August 27, 2008. (RH 8/27/2008)

F.Y. 2008 Unified Planning Work Program
Fourth Quarter Progress Report
April 1, 2008 – June 30, 2008

Executive Summary

The Bloomington/Monroe County Metropolitan Planning Organization (MPO) is charged with implementation of the Fiscal Year 2008 Unified Planning Work Program (UPWP). The UPWP describes all planning activities that are anticipated in the MPO study area over the next programming year, and documents the work that will be performed with federal highway and transit planning funds. This progress report for the fourth quarter of the 2008 fiscal year covers activities accomplished between April 1 and June 30, 2008.

The most notable accomplishment of the Bloomington/Monroe County Metropolitan Planning Organization was the completion and adoption of core documents. Specifically, the MPO garnered local, state, and federal approval of the FY 2009-2010 Unified Planning Work Program (UPWP). Additionally, the MPO successfully drafted and adopted the FY 2009-2012 Transportation Improvement Program (TIP). Both documents involved a great deal of coordination between local and state partners and were completed on schedules prescribed by the Indiana Department of Transportation.

The MPO continued its commitment to engage the community through various committees and through the dissemination of information. MPO staff coordinated meetings of the Policy Committee, the Technical Advisory Committee, the Citizens Advisory Committee, and the Safe Routes to School Task Force. Additionally, MPO staff regularly participated in meetings of the Bloomington Bicycle and Pedestrian Safety Committee, the Monroe County Alternative Transportation and Greenways System Plan Technical Advisory Committee, City of Bloomington Projects Team meetings, and various other committees that are concerned with transportation planning in the MPO urbanized area.

MPO staff also performed core functions to ensure the continued operation of the MPO. Such tasks involved preparing quarterly billings for the third quarter of FY 2008 and providing project input and oversight.

Contract Service providers of the MPO provided invaluable services as well. Bloomington's Engineering Department conducted routine traffic counts, maintained permanent traffic count stations, analyzed and recorded road pavement conditions, and conducted work on the City's 10 year pavement schedule. The Monroe County Highways Department collected traffic counts. The Town of Ellettsville performed traffic counts as well as work on pavement management. Bloomington Transit collected rider surveys and with the assistance of a consultant began work on the Transit Development Program.

F.Y. 2008 Unified Planning Work Program
Fourth Quarter Progress Report
April 1, 2008 – June 30, 2008

Work Program Elements

#101 - Transportation Planning Coordination

This element includes activities associated with administering the MPO Policy Committee, the MPO Technical Advisory Committee, and daily MPO administrative activities with the Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT). Additionally, the MPO must develop and administer the Unified Planning Work Program (UPWP) which describes all planning activities and documents that will be performed with federal planning monies and local matching funds over the course of the fiscal year. The MPO and its staff must also administer FHWA and Federal Transit Administration (FTA) grants associated with the FY 2008 UPWP. Lastly, the MPO participates in monthly meetings of the statewide Indiana MPO Council.

During this quarter, the MPO accomplished the following tasks:

A. Intergovernmental Coordination:
- Coordinated Policy Committee meetings (minutes, packets, staff support at meetings):
  - May 9, 2008
  - June 13, 2008
- Coordinated Technical Advisory Committees (TAC) meetings (minutes, packets, staff support at meetings):
  - April 25, 2008
  - May 23, 2008
- Administered and managed MPO staff
- Managed a Rose-Hulman Institute of Technology student project on the feasibility of connecting N. Dunn St. (ongoing and met with students 4/16/08)
- Participated in the Chamber of Commerce's East/West Corridor Study Team (4/28/08, 6/2/08)
- Fostered interagency coordination with FHWA, INDOT, and local project partners
  - Continued coordination with INDOT concerning the SR 45 project
  - Grant coordination
    - Surface Transportation Program (STP);
    - Transportation Enhancement (TE);
    - Safe Routes To School (SRTS).

B. Unified Planning Work Program:
- Coordinated approval of the self-certification review statement with INDOT;
- Coordinated approval of the cost allocation plan with INDOT;
- Completed and adopted the FY 2009-2010 UPWP.

C. Planning Grant Administration
- Tracked MPO fiscal activities:
  - Tracked expenditures and receipts for the 3rd and 4th quarters of F.Y. 2008
  - Produced F.Y. 2008 3rd Quarter Billings
  - Assisted in an audit by the State Board of Accounts of MPO fiscal activities

D. Indiana Metropolitan Planning Organization Council
- Attended Indiana MPO Council Meetings:
  - April 24, 2008
  - May 22, 2008
  - June 26, 2008

#102 - Training and Professional Development

This element includes activities to continue development of MPO staff expertise through the attendance and participation in transportation related courses, seminars, and conferences, as well as the purchase of educational/reference materials, professional periodical subscriptions, and technical software training.

During this quarter, the MPO accomplished the following tasks:

A. Staff Training, Education, and Technical Needs
- Attended the American Planning Association Indiana Chapter Spring Conference (5/30/08)
- Attended the American Planning Association Training Service on Transit Oriented Developments (6/4-7/08)
- Attended TransCAD Training (6/16-20/08)

#103 - Public Participation Coordination

This element includes activities to solicit citizen input into the transportation planning process through monthly meetings of the Citizens Advisory Committee (CAC). Additionally, the MPO is to maintain a website so that citizens, businesses, and other interested parties can download reports, data, updates, and other information related to the functions of the MPO. Lastly, the MPO must keep current its Public Participation Plan and the associated Citizens Guide to Transportation Planning so that citizens can become familiar with the workings of MPO activities, contacts, and resources.

During this quarter, the MPO accomplished the following tasks:

A. Citizens Advisory Committee:
- Coordinated Citizens Advisory Committee Meetings (minutes, packets, staff support at meetings):
  - April 23, 2008
  - May 28, 2008
  - June 25, 2008

B. Web Site Administration
- Managed the MPO web page
  - Posted materials related to MPO Committees (PC, TAC, CAC) meetings, agendas, and packets
  - Maintained the MPO , Policy/Advisory Committees , transportation planning, and bicycle & pedestrian planning webpages
  - Posted plans and documents on the MPO's webpage as well as the documents clearinghouse webpage

C. Public Involvement Process
- No tasks were accomplished this quarter with the Public Participation Plan

#201 - Transportation Improvement Program

This element includes activities to develop a Transportation Improvement Program (TIP) pursuant to U.S. Department of Transportation requirements which details all federal-aid projects. The MPO took measures to keep the existing document relevant and up-to-date as well as adopt a new TIP serving the next four fiscal years. Staff also attended monthly meetings with representatives from various City of Bloomington departments for transportation project management coordination.

During this quarter, the MPO accomplished the following tasks:

A. Transportation Improvement Program
- Amended the FY 2008-2011 TIP on June 13, 2008 at the request of Bloomington Transit for its Downtown Transfer Facility project
- Adopted the FY 2009-2012 TIP on June 13, 2008 after months of project consideration by committees and the public.

B. Project Coordination
   - Attended monthly meetings of the City of Bloomington's Projects Team
     - April 17, 2008
     - May 15, 2008
     - June 19, 2008

#202 – Annual Documents

This element includes activities to develop an annual crash report to help identify potentially high hazard intersections and corridors within the MPO study area. This report will be used to determine project locations that may be eligible for federal grants aimed at improving safety.

During this quarter, the MPO with the help of its contract service providers accomplished the following tasks:

A. Annual Accident Report
   - Preliminary work and data collection continued on the 2007 Crash Report

#203 – Short Range Transportation Studies

This element includes activities to complete the West 2nd Street Feasibility Study. This study began in FY 2007 to assess traffic congestion, access management, and lack of facilities for alternative modes of transportation.

During this quarter, the MPO with the help of its contract service providers accomplished the following tasks:

A. West 2nd Street Feasibility Study
   - No tasks were accomplished this quarter with the West 2nd Street Feasibility Study

#301 – Long Range Transportation Plan

This element includes activities to maintain the Long Range Transportation Plan and the associated Travel Demand Model. The Travel Demand Model requires routine maintenance to reflect changes in land use, traffic volumes, and other pertinent data as well as changing transportation priorities at the local and State level. The Long Range Transportation Plan subsequently needs to be amended to reflect these priorities and all anticipated federal-aid transportation projects to be constructed within a 25 year horizon.

During this quarter, the MPO accomplished the following tasks:

A. Travel Demand Model Maintenance
   - No tasks were accomplished this quarter with the Travel Demand Model.

B. Long Range Plan Amendment
   - No tasks were accomplished this quarter with the Long Range Plan.

#302 - Intelligent Transportation Systems (ITS)

This element includes activities to evaluate and integrate a system of technologies to improve transportation efficiency, safety, and security known as Intelligent Transportation Systems (ITS). ITS is slated to improve safety, reduce congestion, improve mobility, enhance economic productivity, and save public investment dollars without negatively affecting the environment.

During this quarter, the MPO accomplished the following tasks:

A. ITS Program Development and Implementation
   - Conducted interviews with ITS stakeholders (Bloomington Public Works, Bloomington Police, and Monroe County Highways) and began construction of the ITS architecture.

#401 - Vehicular Data Collection

This element includes activities to conduct vehicular volume counts within the Metropolitan Planning Area for arterial and collector streets on a rotational cycle. The counts will be conducted with assistance from the Bloomington Public Works Department, the Monroe County Highways

Department, and the Town of Ellettsville Planning Department so that the MPO's functionally classified roadway network is completely covered.

During this quarter, the MPO through the help of its contract service providers accomplished the following tasks:

A. Traffic Volume Counting
   - The City of Bloomington Engineering Department conducted forty-two traffic counts and four intersection turning movement counts as well as trained new employees on traffic counting methodologies.
   - The Town of Ellettsville conducted four traffic counts.

#402 - Infrastructure Management

This element includes activities to perform work necessary to develop and maintain a comprehensive infrastructure management plan, with particular emphasis on pavement management. Ongoing assessment of current conditions for existing and new infrastructure is performed and recorded with assistance from the Monroe County Highways Department, Bloomington Public Works Department, and the Town of Ellettsville Planning Department.

During this quarter, the MPO through the help of its contract service providers accomplished the following tasks:

A. Infrastructure Management Plan
   - The City of Bloomington Engineering Department worked on the 10 year pavement schedule and cartegraph entry.
   - The Monroe County Highways Department entered data and analyzed segments as part of infrastructure management.
   - The Town of Ellettsville provided program management of infrastructure management.

#501 - Transit, Bicycle, and Pedestrian Data Collection

This element includes activities to prepare transit ridership data and bicycle and pedestrian volume counts. This information will aid in establishing annual passenger mile estimates for mass transit, will aid in estimating facilities that are under or over utilized, and will aid in the prioritization of capital improvements.

During this quarter, the MPO with the help of its contract service partners accomplished the following tasks:

A. Transit Ridership and Bicycle/Pedestrian Data Collection
   - Bloomington Transit conducted surveys and transit data collection.
   - MPO staff conducted research on bicycle count infrastructure.
   - MPO updated pedestrian and bicycle traffic counting equipment (tubes, and upgraded pedestrian counter hardware)

#502 - Short Range Alternative Transportation Studies

This element includes activities to coordinate the Safe Routes to School Task (SRTS) Force so that local stakeholders can work cooperatively to generate project ideas and apply for SRTS funding. Additionally, MPO staff will promote and encourage bicycle and pedestrian activities as viable modes of transportation through continued cooperation with the Bicycle and Pedestrian Safety Commission. Lastly, Bloomington Transit with the assistance of a private consultant will create a new Transit Development Program (TDP) which will comprehensively analyze the operations of Bloomington Transit and provide recommendations for future improvements to transit.

During this quarter, the MPO with the help of its contract service partners accomplished the following tasks:

A. Safe Routes to School (SRTS) Program
   - Coordinated SRTS Task Force and subcommittee meetings (minutes, packets, &/or staff support):
     - April 2, 2008
     - May 7, 2008

- May 19, 2008

B. Bicycle and Pedestrian Project Coordination
   - Attended meetings and workshops of the Bicycle and Pedestrian Safety Commission:
     - April 7, 2008 (workshop)
     - April 21, 2008 (meeting)
     - May 5, 2008 (workshop)
     - May 19, 2008 (meeting)
     - June 2, 2008 (workshop)
     - June 16, 2008 (meeting)
   - Attended meetings of the Monroe County Alternative Transportation Technical Advisory Committee:
     - May 8, 2008
     - June 2, 2008
     - June 26, 2008
   - Held a Road I course for bicycle safety (5/31/08)
   - Conducted bicycle safety sensibilizations (4/25/08, 5/29/008)
   - Helped coordinate and implement Bloomington Bikes Week events: Bike Commuter 101, Learn to Ride, Bike-to-Work Day (5/10-21/08).
   - Participated in bicycle planning initiatives with Indiana University's Commission on Personal Safety (4/1/08, 5/8/08)

C. Transit Development Program (TDP)
   - Bloomington Transit conducted ridership surveys
   - Bloomington Transit and its consultant began initial work on the Transit Development Program
     - TDP charette (4/10/08)

#503 - Long Range Alternative Transportation Programs

This element includes activities to begin implementation of the SR37/I-69 Alternative Transportation Corridor Study which was produced in FY 2007 and provided design recommendations for bicycle and pedestrian facilities for interchanges and overpasses. Additionally, the MPO supports both the City of Bloomington and Monroe County Alternative Transportation and Greenways System Plans which detail the various community needs and improvements for alternative transportation. Lastly, the MPO must maintain the locally developed Coordinated Human Services Public Transportation Plan and evaluate how transit projects serve the needs of the elderly, persons with disabilities, and persons with low income.

During this quarter, the MPO accomplished the following tasks:

A. Alternative Transportation Corridor Study
   - No tasks were accomplished this quarter with the Alternative Transportation Corridor Study.

B. Bloomington Alternative Transportation and Greenways System Plan
   - No tasks were accomplished this quarter with the Alternative Transportation and Greenways System Plan.

C. Coordinated Human Services Public Transit Plan
   - No tasks were accomplished this quarter with the Coordinated Human Services Public Transit Plan.

Prepared by: Bloomington/Monroe County Metropolitan Planning Organization Staff
July 2008

Bloomington/Monroe County Metropolitan Planning Organizaiton
F.Y. 2008 UPWP - Task# Budget Status

Financial Status Report: Fiscal Year 2008

Quarterly Spending Summary

Quarter	Q1 / FY 2008			Q2 / FY 2008			Q3 / FY 2008			Q4 / FY 2008		
Period	07/01/2007 - 09/30/2007			10/01/2007 - 12/31/2007			01/01/2008 - 03/31/2008			04/01/2008 - 06/30/2008		
Element #	Local	PL/FTA	Total	Local	PL/FTA	Total	Local	PL/FTA	Total	Local	PL/FTA	Total
101	$ 4,013.97	$ 16,055.89	$ 20,069.87	$ 3,651.44	$ 14,605.75	$ 18,257.18	$ 5,194.98	$ 20,779.93	$ 25,974.91	$ 3,631.17	$ 14,524.67	$ 18,155.84
102	$ 263.91	$ 1,055.64	$ 1,319.54	$ 785.28	$ 3,141.14	$ 3,926.42	$ 384.17	$ 1,536.67	$ 1,920.83	$ 708.27	$ 2,833.08	$ 3,541.35
103	$ 578.77	$ 2,315.07	$ 2,893.83	$ 537.76	$ 2,151.02	$ 2,688.78	$ 959.61	$ 3,838.43	$ 4,798.04	$ 547.84	$ 2,191.37	$ 2,739.21
201	$ 74.32	$ 297.26	$ 371.58	$ 521.28	$ 2,085.10	$ 2,606.38	$ 535.17	$ 2,140.67	$ 2,675.84	$ 828.99	$ 3,315.95	$ 4,144.93
202	$ -	$ -	$ -	$ -	$ -	$ -	$ 139.90	$ 559.61	$ 699.51	$ 109.47	$ 437.86	$ 547.33
203	$ -	$ -	$ -	$ -	$ -	$ -	$ 5.36	$ 21.44	$ 26.80	$ -	$ -	$ -
301	$ -	$ -	$ -	$ 12.29	$ 49.15	$ 61.44	$ -	$ -	$ -	$ -	$ -	$ -
302	$ -	$ -	$ -	$ 340.35	$ 1,361.39	$ 1,701.73	$ 131.38	$ 525.52	$ 656.89	$ 184.75	$ 739.01	$ 923.76
401	$ 1,521.30	$ 6,085.18	$ 7,606.48	$ 1,098.98	$ 4,395.93	$ 5,494.91	$ 1,754.46	$ 7,017.82	$ 8,772.28	$ 2,267.75	$ 9,071.00	$ 11,338.75
402	$ 1,506.27	$ 6,025.08	$ 7,531.35	$ 1,212.66	$ 4,850.65	$ 6,063.31	$ 459.54	$ 1,838.17	$ 2,297.71	$ 1,808.30	$ 7,233.19	$ 9,041.49
501	$ 87.55	$ 350.22	$ 437.77	$ 322.57	$ 1,290.28	$ 1,612.85	$ 278.33	$ 1,113.32	$ 1,391.65	$ 361.17	$ 1,444.69	$ 1,805.87
502	$ 532.40	$ 2,129.61	$ 2,662.01	$ 976.90	$ 3,907.58	$ 4,884.48	$ 1,221.10	$ 4,884.40	$ 6,105.50	$ 10,772.93	$ 43,091.72	$ 53,864.65
503	$ 4,283.38	$ 17,133.50	$ 21,416.88	$ 937.50	$ 3,750.02	$ 4,687.52	$ 93.56	$ 374.23	$ 374.23	$ -	$ -	$ -
Total	**$ 12,861.86**	**$ 51,447.45**	**$ 64,309.32**	**$ 10,397.00**	**$ 41,588.00**	**$ 51,985.00**	**$ 11,157.55**	**$ 44,630.20**	**$ 55,787.75**	**$ 21,220.63**	**$ 84,882.53**	**$ 106,103.17**

Fiscal Year Budget Summary

	Programmed Funds			Funds Expended To Date			Unspent Funds			Total Expenditures Ratio	
Element #	Local	PL/FTA	Total	Local	PL/FTA	Total	Local	PL/FTA	Total	Expended	Unspent
101	$ 14,016.50	$ 56,065.98	$ 70,082.48	$ 16,491.56	$ 65,966.24	$ 82,457.79	$ (2,475.06)	$ (9,900.26)	$ (12,375.31)	117.7%	-17.7%
102	$ 3,118.17	$ 12,472.67	$ 15,590.84	$ 2,141.63	$ 8,566.52	$ 10,708.14	$ 976.54	$ 3,906.15	$ 4,882.70	68.7%	31.3%
103	$ 5,215.76	$ 20,863.03	$ 26,078.79	$ 2,623.97	$ 10,495.89	$ 13,119.86	$ 2,591.79	$ 10,367.14	$ 12,958.93	50.3%	49.7%
201	$ 3,982.18	$ 15,928.70	$ 19,910.88	$ 1,959.74	$ 7,838.98	$ 9,798.72	$ 2,022.44	$ 8,089.72	$ 10,112.16	49.2%	50.8%
202	$ 1,789.05	$ 7,156.21	$ 8,945.26	$ 249.37	$ 997.47	$ 1,246.84	$ 1,539.68	$ 6,158.74	$ 7,698.42	13.9%	86.1%
203	$ 4,279.77	$ 17,119.10	$ 21,398.87	$ 5.36	$ 21.44	$ 26.80	$ 4,274.41	$ 17,097.66	$ 21,372.07	0.1%	99.9%
301	$ 5,109.52	$ 20,438.08	$ 25,547.60	$ 12.29	$ 49.15	$ 61.44	$ 5,097.23	$ 20,388.93	$ 25,486.16	0.2%	99.8%
302	$ 638.82	$ 2,555.27	$ 3,194.09	$ 656.48	$ 2,625.91	$ 3,282.38	$ (17.66)	$ (70.64)	$ (88.29)	102.8%	-2.8%
401	$ 10,744.14	$ 42,976.61	$ 53,720.75	$ 6,642.48	$ 26,569.94	$ 33,212.42	$ 4,101.66	$ 16,406.67	$ 20,508.33	61.8%	38.2%
402	$ 5,200.00	$ 20,800.00	$ 26,000.00	$ 4,986.77	$ 19,947.09	$ 24,933.86	$ 213.23	$ 852.91	$ 1,066.14	95.9%	4.1%
501	$ 2,752.94	$ 11,011.76	$ 13,764.70	$ 1,049.63	$ 4,198.51	$ 5,248.14	$ 1,703.31	$ 6,813.25	$ 8,516.56	38.1%	61.9%
502	$ 13,662.42	$ 54,649.66	$ 68,312.08	$ 13,503.33	$ 54,013.31	$ 67,516.64	$ 159.09	$ 636.35	$ 795.44	98.8%	1.2%
503	$ 5,294.85	$ 21,179.39	$ 26,474.24	$ 5,314.44	$ 21,257.75	$ 26,572.19	$ (19.59)	$ (78.36)	$ (97.95)	100.4%	-0.4%
Total	**$ 75,804.12**	**$ 303,216.46**	**$ 379,020.58**	**$ 55,637.05**	**$ 222,548.19**	**$ 278,185.23**	**$ 20,167.07**	**$ 80,668.27**	**$ 100,835.35**	**73.4%**	**26.6%**

Bloomington/Monroe County Metropolitan Planning Organization

Unified Planning Work Program Fiscal Year 2008

Annual Completion Report

INTRODUCTION

The A*nnual Completion Report* summarizes the activities undertaken by the Bloomington/Monroe County Metropolitan Planning Organization (MPO) as identified in the *Unified Planning Work Program Fiscal Year 2008* (UPWP). This report describes activities accomplished in Fiscal Year (FY) 2008 between July 1, 2007 and June 30, 2008. This document is prepared to meet federal financial reporting requirements.

The Bloomington/Monroe County Metropolitan Planning Organization had a budget totaling $379,020 for FY 2008 which came from the following sources:

- Metropolitan Planning Funds (PL) provided by the Federal Highway Administration (FHWA) through the Indiana Department of Transportation (INDOT) in the amount of $263,207; and
- Section 5303 funds provided by the Federal Transit Administration (FTA) through the Indiana Department of Transportation in the amount of $40,041.
- Local match provided by the MPO and its contract service agencies in the amount $75,812 (or 20% of total project cost to match against Federal funds received).

The MPO's most significant accomplishment was completion of a crash report for calendar years 2003 to 2006. The report had not been produced for several years due to staff turn over and unreliable data from the State's Vehicle Crash Reporting System (which has since been replaced with the Automated Reporting Information Exchange System). The report has been improved to include a wider timeframe for analysis, improved analysis methodology, and enhanced visual representation of data.

Other notable accomplishments of the MPO and its staff were focused on alternative transportation. The MPO assisted the City in the update to its Bicycle and Pedestrian Transportation and Greenways System Plan. The Plan will guide the City's future bicycle and pedestrian investments. Additionally, an MPO staff member successfully completed a League Certified Instructor (LCI) seminar by the League of American Bicyclists. Such accreditation will enable the MPO to initiate increased efforts aimed at bicycle safety.

In addition to the work done by the MPO and its staff, agreements were executed with local public agencies (referred to in this report as Contract Service Agencies or CSAs) so that they could assist the MPO accomplish certain UPWP elements. For example, the City of Bloomington Engineering Department conducted nearly 170 traffic and intersection turning movements counts and studies under Element #401 Vehicular Data Collection; Monroe County Highway Department conducted road segment data analysis of the pavement management system under Element #402 Infrastructure Management Plan; and Bloomington Transit conducted ridership surveys under Element #501 Transit, Bicycle, and Pedestrian Data Collection. The use of consultants provided valuable services as well. Under Element 502 (Short Range Alternative Transportation), Bloomington Transit hired a consultant to help with the development of its Transit Development Plan.

The following sections of this report give an overview of what was accomplished during FY 2008 and the amount of money spent on each element. The first section titled Work Element Analyses gives a brief description of the UPWP Work Elements and identifies what was accomplished. (Note: The organization of the Work Element Analyses is meant to be consistent with the FY 2008 UPWP). Additionally, this section gives the budgetary standing of each element and provides a statement of its status at the end of FY 2008. The last section of the report, Expenditure Summary, is a synopsis of all expenditures made in FY 2008 broken down by quarter, by Work Element, and by Contract Service Agency.

WORK ELEMENT ANALYSES

This section of the Annual Completion Report analyzes each work element of the FY 2008 Unified Planning Work Program and identifies the tasks to be accomplished, the work completed by the MPO and its contract service agencies, budgetary breakdown of the element, and the status of the element at the end of FY 2008.

#101 - Transportation Planning Coordination

Purpose

This element includes activities associated with administering the MPO Policy Committee, the MPO Technical Advisory Committee, and daily MPO administrative activities with the Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT). Additionally, the MPO must develop and administer the Unified Planning Work Program (UPWP) which describes all planning activities and documents that will be performed with federal planning monies and local matching funds over the course of the fiscal year. The MPO and its staff must also administer FHWA and Federal Transit Administration (FTA) grants associated with the FY 2008 UPWP. Lastly, the MPO participates in monthly meetings of the statewide Indiana MPO Council.

Accomplishments

During FY 2008, the MPO accomplished the following tasks identified in the UPWP:

A. Intergovernmental Coordination:
- Organized six meetings of the Policy Committee (1st, 2nd, 3rd, & 4th Quarters)
  - Sought a legal determination for the Policy Committee on the consequences of including/omitting state projects from the 2030 Long Range Transportation Plan (1st Quarter)
- Organized seven meetings of the Technical Advisory Committee (1st, 2nd, 3rd, & 4th Quarters)
- Administered and managed MPO staff (1st, 2nd, 3rd, & 4th Quarters)
- Managed a Rose-Hulman Institute of Technology student project on the feasibility of connecting N. Dunn St., a project which is identified in the LRTP (1st, 2nd, 3rd, & 4th Quarters)
- Fostered interagency coordination with FHWA, INDOT, and local project partners (1st, 2nd, 3rd, & 4th Quarters)
  - Fostered coordination with INDOT concerning the SR 45 project, passenger rail study, and other State projects/studies.
  - Assisted local public agencies with grant coordination
    - Surface Transportation Program (STP)
    - Transportation Enhancement (TE)
    - Safe Routes to School (SRTS)
    - Community Planning Grant
  - Participated in the Chamber of Commerce E/W Traffic Subcommittee
  - Participated in a Central Indiana Regional Transportation Authority meeting

B. Unified Planning Work Program:
- Drafted and adopted the FY 2009-2010 UPWP after extensive coordination with MPO committees, local public agencies, and the public (3rd & 4th Quarters)
- Developed and updated the Cost Allocation Plan/Indirect Cost Proposal (3rd & 4th Quarters)
- Developed the Self Certification Statement (3rd & 4th Quarters)
- Drafted and executed Contract Service Agreements for Fiscal Years 2008 (1st, 2nd, 3rd, & 4th Quarters)

C. Planning Grant Administration
- Tracked MPO fiscal activities (1st, 2nd, 3rd, & 4th Quarters):
  - Tracked expenditures and receipts for FY 2008
  - Produced Quarter Billings
  - Facilitated a routine audit by the State Board of Accounts

- Completed and transmitted the FY 2007 Annual Completion Report (1st Quarter)

D. Indiana Metropolitan Planning Organization Council
- Attended nine Indiana MPO Council Meetings (1st, 2nd, 3rd, & 4th Quarters)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 56,065.95	$ 65,966.24	$ (9,900.29)	117.7%	-17.7%
Local	$ 14,016.50	$ 16,491.56	$ (2,475.06)		
Total	**$ 70,082.45**	**$ 82,457.80**	**$ (12,375.35)**		

Status

This work element was satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* (#101).

#102 - Training and Professional Development

Purpose

This element includes activities to continue development of MPO staff expertise through the attendance and participation in transportation related courses, seminars, and conferences, as well as the purchase of educational/reference materials, professional periodical subscriptions, and technical software training.

Accomplishments

During FY 2008, the MPO accomplished the following tasks identified in the UPWP:

A. Staff Training, Education, and Technical Needs
- Renewed annual TransCAD license (1st Quarter)
- Attended a Safe Routes to School web conference by the Institute of Transportation Engineers (1st Quarter)
- Attended the Indiana MPO Council Annual Conference (2nd Quarter)
- Attended and successfully completed a League Certified Instructor seminar by the League of American Bicyclists (2nd Quarter)
- Attended Indiana Road School (3rd Quarter)
- Attended TransCAD training (4th Quarter)
- Attended the American Planning Association Indiana Chapter Spring Conference (4th Quarter)
- Attended the American Planning Association Training Service on Transit Oriented Developments (4th Quarter)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 12,472.67	$ 8,566.52	$ 3,906.15	68.7%	31.3%
Local	$ 3,118.17	$ 2,141.63	$ 976.54		
Total	**$ 15,590.84**	**$ 10,708.15**	**$ 4,882.69**		

Status

This work element was satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* (#102).

#103 - Public Participation Coordination

Purpose

This element includes activities to solicit citizen input into the transportation planning process through monthly meetings of the Citizens Advisory Committee (CAC). Additionally, the MPO is to maintain a website so that citizens, businesses, and other interested parties can download reports, data, updates, and other information related to the functions of the MPO. Lastly, the MPO must keep current its Public Participation Plan and the associated Citizens Guide to Transportation Planning so that citizens can become familiar with the workings of MPO activities, contacts, and resources.

Accomplishments

During FY 2008 the MPO accomplished the following tasks as identified in the UPWP:

A. Citizens Advisory Committee (CAC):
   - The Citizens Advisory Committee met ten times (1st, 2nd, 3rd, & 4th Quarters)

B. MPO Web Page Administration
   - Managed the MPO's website; www.bloomington.in.gov/mpo (1st, 2nd, 3rd, & 4th Quarters)
     - Posted materials related to MPO Committee (PC, TAC, CAC) meetings, agendas, and packets
     - Transitioned website from egov to the City's new platform.
     - Maintained the MPO, Policy/Advisory Committees, Transportation Planning, Alternative Transportation Planning, and Documents Clearinghouse webpages.
     - Posted draft/final plans and documents to the website and the Monroe County Public Library (Amended FY 2008-2011 TIP, FY 2009-2012 TIP, FY 2009-2010 UPWP, etc.)

C. Public Involvement Process
   - Completed the update to the *"Moving Forward: A Citizens Guide to Transportation Planning"* (1st, 2nd, & 3rd Quarters)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 20,863.03	$ 10,495.89	$ 10,367.14	**50.3%**	**49.7%**
Local	$ 5,215.76	$ 2,623.97	$ 2,591.79		
Total	**$ 26,078.79**	**$ 13,119.86**	**$ 12,958.93**		

Status

This work element was satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* (#103).

#201 - Transportation Improvement Program

Purpose

This element includes activities to develop a Transportation Improvement Program (TIP) pursuant to U.S. Department of Transportation requirements which details all federal-aid projects. The MPO took measures to keep the existing document relevant and up-to-date as well as adopt a new TIP serving the next four fiscal years. Staff also attended monthly meetings with representatives from various City of Bloomington departments for transportation project management coordination.

Accomplishments

During FY 2008, the MPO accomplished the following tasks:

A. Transportation Improvement Program
- Drafted and adopted the FY 2009-2012 TIP after extensive coordination with local project partners (2nd, 3rd, & 4th Quarters)
  - Advertised and held a 30 day public comment period
- Processed and adopted TIP amendments to the FY 2008-2011 TIP (3rd & 4th Quarters)
  - Operational Assistance – updated costs to reflect funds obtained by Job Access and Reverse Commute grants (Bloomington Transit)
  - Added Safe Routes to School awards (City of Bloomington, Richland Bean Blossom Community School Corporation, Monroe County Community School Corporation)
  - Country Club and Rogers Street intersection – updated construction cost and construction year (City of Bloomington)
  - State Road 45 from Pete Ellis Dr. to Russell Rd. – updated engineering and right of way costs (INDOT)
  - State Road 45/46 from Monroe St. to Kinser Pike – updated engineering costs (INDOT)
  - State Road 46 from State Road 446 to State Road 135 – removed from TIP (INDOT)
  - Downtown Transfer Facility – updated project cost and year (Bloomington Transit)

B. Project Coordination
- Attended twelve meetings of the City of Bloomington's Projects Team (1st, 2nd, 3rd, & 4th Quarters)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 15,928.70	$ 7,838.98	$ 8,089.72	49.2%	50.8%
Local	$ 3,982.18	$ 1,959.74	$ 2,022.44		
Total	**$ 19,910.88**	**$ 9,798.72**	**$ 10,112.16**		

Status

This work element was satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* (#201).

#202 – Annual Documents

Purpose

This element includes activities to develop an annual crash report to help identify potentially high hazard intersections and corridors within the MPO study area. This report will be used to determine project locations that may be eligible for federal grants aimed at improving safety.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. Calendar Year 2007 Accident Report
- Completed the MPO Crash Report which analyzed crash data for calendar years 2003-2006 (1st Quarter)
- Preliminary work and data collection was done on the Calendar Year 2007 Accident Report (4th Quarter)

B. Hazard Elimination and Safety (HES) Application Coordination
- No tasks were accomplished with HES Application Coordination in FY 2008

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 7,156.21	$ 997.47	$ 6,158.74	13.9%	86.1%
Local	$ 1,789.05	$ 249.37	$ 1,539.68		
Total	**$ 8,945.26**	**$ 1,246.84**	**$ 7,698.42**		

Status

Aspects of this work element were satisfactorily completed in Fiscal Year 2008. The MPO will continue to work on the Calendar Year 2007 Crash report and is on schedule to have it completed by the first quarter of FY 2009. Additionally, the MPO will need to develop project selection methodology and grant administration in FY 2009 for the Highway Safety Improvement Program (HSIP) program (formerly HES). The ongoing status of this element is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* under a reorganized work element structure (#201 – HSIP & #401-Crash Report).

#203 – Short Range Transportation Studies

Purpose

This element includes activities to complete the West 2nd Street Feasibility Study with the help of a contract service agency. This study began in FY 2007 to assess traffic congestion, access management, and lack of facilities for alternative modes of transportation.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. West 2nd Street Feasibility Study
   - No tasks were accomplished with the West 2nd Street Feasibility Study in FY 2008.

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 17,119.10	$ 21.44	$ 17,097.66	0.1%	99.9%
Local	$ 4,279.77	$ 5.36	$ 4,274.41		
Total	**$ 21,398.87**	**$ 26.80**	**$ 21,372.07**		

Status

This work element was not satisfactorily completed in Fiscal Year 2008 because the project was put on hold by the contract service agency. Its ongoing status is carried into the *Fiscal Year 2009-20210 Unified Planning Work Program* under a reorganized work element structure (#202).

#301 – Long Range Transportation Plan

Purpose

This element includes activities to maintain the Long Range Transportation Plan and the associated Travel Demand Model. The Travel Demand Model requires routine maintenance to reflect changes in land use, traffic volumes, and other pertinent data as well as changing transportation priorities at the local and State level. The Long Range Transportation Plan subsequently needs to be amended to reflect these priorities and all anticipated federal-aid transportation projects to be constructed within a 25 year horizon.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. Travel Demand Model Maintenance
   - Some preliminary self-study was conducted on the Travel Demand Model using TransCAD (2nd Quarter)

B. Long Range Plan Amendment
   - No tasks were accomplished with the Long Range Plan in FY 2008

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 20,438.08	$ 49.15	$ 20,388.93	0.2%	99.8%
Local	$ 5,109.52	$ 12.29	$ 5,097.23		
Total	**$ 25,547.60**	**$ 61.44**	**$ 25,486.16**		

Status

This work element was not satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2009-20210 Unified Planning Work Program* under a reorganized work element structure (#301).

#302 - Intelligent Transportation Systems (ITS)

Purpose

This element includes activities to evaluate and integrate a system of technologies to improve transportation efficiency, safety, and security known as Intelligent Transportation Systems (ITS). ITS is slated to improve safety, reduce congestion, improve mobility, enhance economic productivity, and save public investment dollars without negatively affecting the environment.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. ITS Program Development and Implementation
   - Preliminary research and interviews were conducted needed in the development of an ITS architecture for the MPO (2nd, 3rd, & 4th Quarters)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 2,555.27	$ 2,625.91	$ (70.64)	102.8%	-2.8%
Local	$ 638.82	$ 656.48	$ (17.66)		
Total	**$ 3,194.09**	**$ 3,282.39**	**$ (88.30)**		

Status

Aspects of this work element were satisfactorily completed in Fiscal Year 2008. The MPO will continue to work on development of its Intelligent Transportation System Architecture and is on schedule to have it completed by the first quarter of FY 2009. The ongoing status of this element is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* under a reorganized work element structure (#301).

#401 - Vehicular Data Collection

This element includes activities to conduct vehicular volume counts within the Metropolitan Planning Area for arterial and collector streets on a rotational cycle. The counts will be conducted with assistance from the Bloomington Public Works Department and the Town of Ellettsville Planning Department so that the MPO's functionally classified roadway network is completely covered.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. Traffic Volume Counting
- The City of Bloomington conducted 143 traffic counts, 4 intersection warrant studies, and 22 intersection turning movements within the MPO urbanized area boundary including those sites associated with the Highway Performance Monitoring System (HPMS) as well as trained staff and traffic counting protocols (1st, 2nd, 3rd, & 4th Quarters)
- The City of Bloomington performed maintenance on three permanent counting sites and installed new electronic cards on three counters (1st Quarter).
- The Town of Ellettsville held traffic counting meetings and completed 4 traffic counts within the MPO urbanized area (3rd & 4th Quarters)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 42,976.61	$ 26,569.94	$ 16,406.67	61.8%	38.2%
Local	$ 10,744.14	$ 6,642.48	$ 4,101.66		
Total	**$ 53,720.75**	**$ 33,212.42**	**$ 20,508.33**		

Status

Aspects of this work element were satisfactorily completed in Fiscal Year 2008. The MPO will need to collaborate with local project partners in updating local traffic counting procedures. The ongoing status of this element is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* under a reorganized work element structure (#401).

#402 - Infrastructure Management

This element includes activities to perform work necessary to develop and maintain a comprehensive infrastructure management plan, with particular emphasis on pavement management. Ongoing assessment of current conditions for existing and new infrastructure is performed and recorded with assistance from the Monroe County Highways Department, Bloomington Public Works Department, and the Town of Ellettsville Planning Department.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. Infrastructure Management Plan
- The City of Bloomington analyzed the current roadway pavement conditions of over 500 segments within its municipal boundaries. The City of Bloomington also further developed its Ten Year Pavement Management Plan utilizing the overall condition index and the roadway classification (1st, 2nd, 3rd, & 4th Quarters).
- The Town of Ellettsville provided program management of infrastructure management (3rd & 4th Quarters)
- Monroe County conducted road segment data analysis of the pavement management system. (1st, 2nd, 3rd, & 4th Quarters)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 20,800.00	$ 19,947.09	$ 852.91	95.9%	4.1%
Local	$ 5,200.00	$ 4,986.77	$ 213.23		
Total	**$ 26,000.00**	**$ 24,933.86**	**$ 1,066.14**		

Status

This work element was satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* (#402).

#501 - Transit, Bicycle, and Pedestrian Data Collection

This element includes activities to prepare transit ridership data and bicycle and pedestrian volume counts. This information will aid in establishing annual passenger mile estimates for mass transit, will aid in estimating facilities that are under or over utilized, and will aid in the prioritization of capital improvement investments for alternative transportation.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. Transit, Bicycle and Pedestrian Data Collection
- Bloomington Transit conducted transit data collection surveys (3rd & 4th Quarters)
- MPO staff coordinated with the City of Bloomington Engineering Dept. on sidewalk inventory and assessment. (1st Quarter)
- MPO staff conducted research on pedestrian level of service and bicycle counting infrastructure (2nd & 3rd Quarters)
- MPO made upgrades to pedestrian and bicycle counting equipment (tubes, upgraded circuitry) (4th Quarter)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 11,011.76	$ 4,198.51	$ 6,813.25	38.1%	61.9%
Local	$ 2,752.94	$ 1,049.63	$ 1,703.31		
Total	**$ 13,764.70**	**$ 5,248.14**	**$ 8,516.56**		

Status

Aspects of this work element were satisfactorily completed in Fiscal Year 2008. The MPO will need to coordinate with local planning partners on streamlining bicycle and pedestrian count procedures. The ongoing status of this element is carried into the *Fiscal Year 2009-2010 Unified Planning Work Program* (#501).

#502 - Short Range Alternative Transportation Studies

This element includes activities to coordinate the Safe Routes to School Task (SRTS) Force so that local stakeholders can work cooperatively to generate project ideas and apply for SRTS funding. Additionally, MPO staff will promote and encourage bicycle and pedestrian activities as viable modes of transportation through continued cooperation with the Bicycle and Pedestrian Safety Commission. Lastly, Bloomington Transit with the assistance of a private consultant will create a new Transit Development Program (TDP)

which will comprehensively analyze the operations of Bloomington Transit and provide recommendations for future improvements to transit.

Accomplishments

During FY 2008, the MPO with the help of its contract service agencies accomplished the following tasks:

A. Safe Routes to School (SRTS) Program
   - Coordinated the Safe Routes to School Task Force (1st, 2nd, 3rd, & 4th Quarters)
     - Coordinated regular meetings of the Safe Routes to School Task Force and its subcommittees
     - Coordinated International Walk to School Day activities at 5 schools within MPO urbanized area
     - Assisted with writing, ranking, and submittal of two SRTS grant applications to the State

B. Bicycle and Pedestrian Project Coordination
   - Attended meetings and workshops of the Bloomington Bicycle and Pedestrian Safety Commission (1st, 2nd, 3rd, & 4th Quarters)
   - Attended meetings of the Monroe County Alternative Transportation Technical Advisory Committee (1st, 2nd, 3rd, & 4th Quarters)
   - Attended meetings of the Indiana University Commission on Personal Safety (4th Quarter)
   - Held bicycle safety sensitization and outreach (3rd & 4th Quarters)

C. Transit Development Program (TDP)
   - Bloomington Transit, with the help of a consultant, completed its Fixed Transit Route Operation Analysis (1st Quarter)
   - Bloomington Transit conducted ridership surveys as part of TDP development (3rd & 4th Quarters)
   - Bloomington Transit, with the help of a consultant, began work on the TDP (3rd & 4th Quarters)
     - A public charette was held to get initial feedback on transit

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 54,649.66	$ 54,013.31	$ 636.35	98.8%	1.2%
Local	$ 13,662.42	$ 13,503.33	$ 159.09		
Total	**$ 68,312.08**	**$ 67,516.64**	**$ 795.44**		

Status

This work element was satisfactorily completed in Fiscal Year 2008 and its ongoing status is carried into the *Fiscal Year 2008 Unified Planning Work Program* under a reorganized work element structure (#502).

#503 - Long Range Alternative Transportation Programs

This element includes activities to begin implementation of the SR37/I-69 Alternative Transportation Corridor Study which was produced in FY 2007 and provided design recommendations for bicycle and pedestrian facilities for interchanges and overpasses. Additionally, the MPO supports both the City of Bloomington and Monroe County Alternative Transportation and Greenways System Plans which detail the various community needs and improvements for alternative transportation. Lastly, the MPO must maintain the locally developed Coordinated Human Services Public Transportation Plan and evaluate how transit projects serve the needs of the elderly, persons with disabilities, and persons with low income.

Accomplishments

During FY 2008, the MPO accomplished the following tasks:

A. Alternative Transportation Corridor Study
   - No tasks were accomplished with the Alternative Transportation and Greenways System Plan in FY 2008

B. Bloomington Alternative Transportation and Greenways System Plan
   - Drafted and facilitated adoption of the Bloomington Bicycle and Pedestrian Transportation and Greenways System Plan. (1st, 2nd, & 3rd Quarters)
     - Coordinated strategic advisory committee meetings
     - Coordinated public workshops and informational sessions
     - Presented the plan to public officials for adoption

C. Coordinated Human Services Public Transit Plan
   - Coordinated Mobility Steering Committee meetings (1st & 2nd Quarter)
   - Facilitated Job Access and Reverse Commute, New Freedom, and 5310 grant applications (2nd & 3rd Quarters).
   - Evaluated the need to update the Coordinated Human Services Public Transportation Plan (1st Quarter)

Budget

Funding Source	Programmed Amount	Spent Amount	Remaining Balance	Expenditures Ratio	
				Spent	Unspent
Federal (PL/FTA)	$ 21,179.39	$ 21,257.75	$ (78.36)	**100.4%**	**-0.4%**
Local	$ 5,294.85	$ 5,314.44	$ (19.59)		
Total	**$ 26,474.24**	**$ 26,572.19**	**$ (97.95)**		

Status

Aspects of this work element were satisfactorily completed in Fiscal Year 2008. The MPO will have to continue to facilitate coordination with local transit providers to optimize use of transit and increase efficiency. Additionally, the MPO will need to decide if it wishes to take action on the recommendations put forth in the Alternative Transportation Corridor Study. The ongoing status of this element is carried into the *Fiscal Year 2000-2010 Unified Planning Work Program* under a reorganized work element structure (#502).

EXPENDITURE SUMMARY

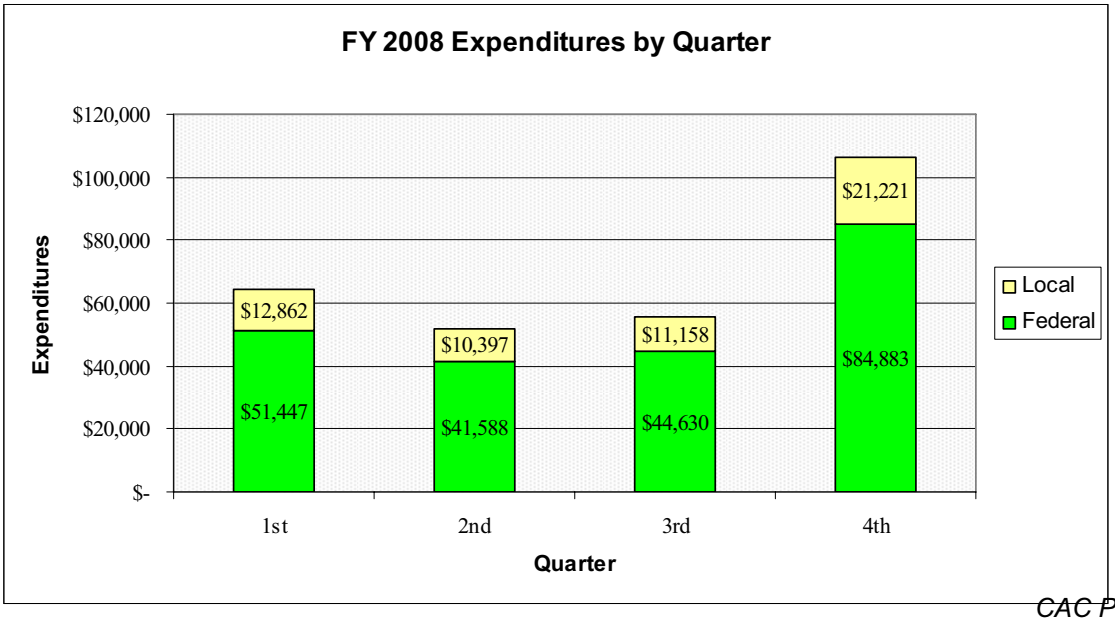
FY 2008 QUARTERLY EXPENDITURES

First Quarter Summary			
Quarter	Q1 / FY 2008		
Period	07/01/2007 - 09/30/2007		
Element #	Local Share	PL/FTA Share	Total Amount
101	$ 4,013.97	$ 16,055.89	$ 20,069.87
102	$ 263.91	$ 1,055.64	$ 1,319.54
103	$ 578.77	$ 2,315.07	$ 2,893.83
201	$ 74.32	$ 297.26	$ 371.58
202	$ -	$ -	$ -
203	$ -	$ -	$ -
301	$ -	$ -	$ -
302	$ -	$ -	$ -
401	$ 1,521.30	$ 6,085.18	$ 7,606.48
402	$ 1,506.27	$ 6,025.08	$ 7,531.35
501	$ 87.55	$ 350.22	$ 437.77
502	$ 532.40	$ 2,129.61	$ 2,662.01
503	$ 4,283.38	$ 17,133.50	$ 21,416.88
Total	**$ 12,861.86**	**$ 51,447.45**	**$ 64,309.32**

Second Quarter Summary			
Quarter	Q2 / FY 2008		
Period	10/01/2007 - 12/31/2007		
Element #	Local Share	PL/FTA Share	Total Amount
101	$ 3,651.44	$ 14,605.75	$ 18,257.18
102	$ 785.28	$ 3,141.14	$ 3,926.42
103	$ 537.76	$ 2,151.02	$ 2,688.78
201	$ 521.28	$ 2,085.10	$ 2,606.38
202	$ -	$ -	$ -
203	$ -	$ -	$ -
301	$ 12.29	$ 49.15	$ 61.44
302	$ 340.35	$ 1,361.39	$ 1,701.73
401	$ 1,098.98	$ 4,395.93	$ 5,494.91
402	$ 1,212.66	$ 4,850.65	$ 6,063.31
501	$ 322.57	$ 1,290.28	$ 1,612.85
502	$ 976.90	$ 3,907.58	$ 4,884.48
503	$ 937.50	$ 3,750.02	$ 4,687.52
Total	**$ 10,397.00**	**$ 41,588.00**	**$ 51,985.00**

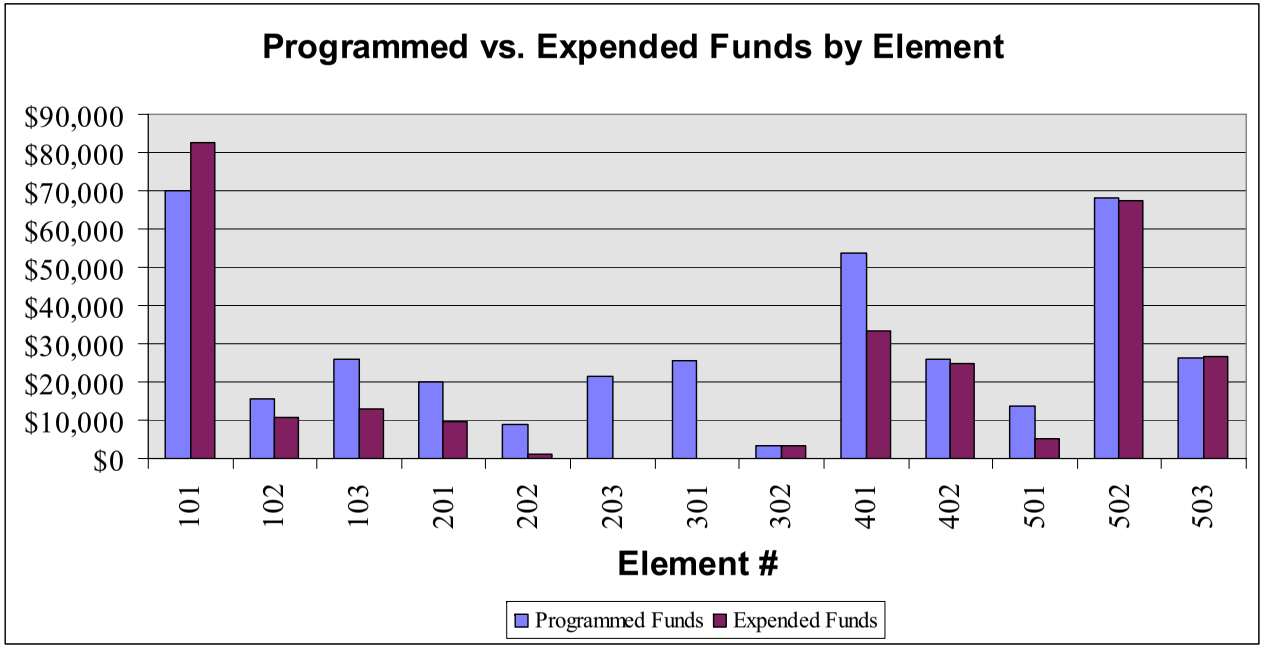
Third Quarter Summary			
Quarter	Q3 / FY 2008		
Period	01/01/2008 - 03/31/2008		
Element #	Local Share	PL/FTA Share	Total Amount
101	$ 5,194.98	$ 20,779.93	$ 25,974.91
102	$ 384.17	$ 1,536.67	$ 1,920.83
103	$ 959.61	$ 3,838.43	$ 4,798.04
201	$ 535.17	$ 2,140.67	$ 2,675.84
202	$ 139.90	$ 559.61	$ 699.51
203	$ 5.36	$ 21.44	$ 26.80
301	$ -	$ -	$ -
302	$ 131.38	$ 525.52	$ 656.89
401	$ 1,754.46	$ 7,017.82	$ 8,772.28
402	$ 459.54	$ 1,838.17	$ 2,297.71
501	$ 278.33	$ 1,113.32	$ 1,391.65
502	$ 1,221.10	$ 4,884.40	$ 6,105.50
503	$ 93.56	$ 374.23	$ 467.79
Total	**$ 11,157.55**	**$ 44,630.20**	**$ 55,787.75**

Fourth Quarter Summary			
Quarter	Q4 / FY 2008		
Period	04/01/2008 - 06/30/2008		
Element #	Local Share	PL/FTA Share	Total Amount
101	$ 3,631.17	$ 14,524.67	$ 18,155.84
102	$ 708.27	$ 2,833.08	$ 3,541.35
103	$ 547.84	$ 2,191.37	$ 2,739.21
201	$ 828.99	$ 3,315.95	$ 4,144.93
202	$ 109.47	$ 437.86	$ 547.33
203	$ -	$ -	$ -
301	$ -	$ -	$ -
302	$ 184.75	$ 739.01	$ 923.76
401	$ 2,267.75	$ 9,071.00	$ 11,338.75
402	$ 1,808.30	$ 7,233.19	$ 9,041.49
501	$ 361.17	$ 1,444.69	$ 1,805.87
502	$ 10,772.93	$ 43,091.72	$ 53,864.65
503	$ -	$ -	$ -
Total	**$ 21,220.63**	**$ 84,882.53**	**$ 106,103.17**



FY 2008 TOTAL EXPENDITURES PER ELEMENT

Fiscal Year 2008 Budget Summary											
	Programmed Funds			Funds Expended To Date			Unspent Funds			Total Expenditures Ratio	
Element #	Local	PL/FTA	Total	Local	PL/FTA	Total	Local	PL/FTA	Total	Expended	Unspent
101	$ 14,016.50	$ 56,065.98	$ 70,082.48	$ 16,491.56	$ 65,966.24	$ 82,457.79	$ (2,475.06)	$ (9,900.26)	$ (12,375.31)	117.7%	-17.7%
102	$ 3,118.17	$ 12,472.67	$ 15,590.84	$ 2,141.63	$ 8,566.52	$ 10,708.14	$ 976.54	$ 3,906.15	$ 4,882.70	68.7%	31.3%
103	$ 5,215.76	$ 20,863.03	$ 26,078.79	$ 2,623.97	$ 10,495.89	$ 13,119.86	$ 2,591.79	$ 10,367.14	$ 12,958.93	50.3%	49.7%
201	$ 3,982.18	$ 15,928.70	$ 19,910.88	$ 1,959.74	$ 7,838.98	$ 9,798.72	$ 2,022.44	$ 8,089.72	$ 10,112.16	49.2%	50.8%
202	$ 1,789.05	$ 7,156.21	$ 8,945.26	$ 249.37	$ 997.47	$ 1,246.84	$ 1,539.68	$ 6,158.74	$ 7,698.42	13.9%	86.1%
203	$ 4,279.77	$ 17,119.10	$ 21,398.87	$ 5.36	$ 21.44	$ 26.80	$ 4,274.41	$ 17,097.66	$ 21,372.07	0.1%	99.9%
301	$ 5,109.52	$ 20,438.08	$ 25,547.60	$ 12.29	$ 49.15	$ 61.44	$ 5,097.23	$ 20,388.93	$ 25,486.16	0.2%	99.8%
302	$ 638.82	$ 2,555.27	$ 3,194.09	$ 656.48	$ 2,625.91	$ 3,282.38	$ (17.66)	$ (70.64)	$ (88.29)	102.8%	-2.8%
401	$ 10,744.14	$ 42,976.61	$ 53,720.75	$ 6,642.48	$ 26,569.94	$ 33,212.42	$ 4,101.66	$ 16,406.67	$ 20,508.33	61.8%	38.2%
402	$ 5,200.00	$ 20,800.00	$ 26,000.00	$ 4,986.77	$ 19,947.09	$ 24,933.86	$ 213.23	$ 852.91	$ 1,066.14	95.9%	4.1%
501	$ 2,752.94	$ 11,011.76	$ 13,764.70	$ 1,049.63	$ 4,198.51	$ 5,248.14	$ 1,703.31	$ 6,813.25	$ 8,516.56	38.1%	61.9%
502	$ 13,662.42	$ 54,649.66	$ 68,312.08	$ 13,503.33	$ 54,013.31	$ 67,516.64	$ 159.09	$ 636.35	$ 795.44	98.8%	1.2%
503	$ 5,294.85	$ 21,179.39	$ 26,474.24	$ 5,314.44	$ 21,257.75	$ 26,572.19	$ (19.59)	$ (78.36)	$ (97.95)	100.4%	-0.4%
Total	**$ 75,804.12**	**$ 303,216.46**	**$ 379,020.58**	**$ 55,637.05**	**$ 222,548.19**	**$ 278,185.23**	**$ 20,167.07**	**$ 80,668.27**	**$ 100,835.35**	**73.4%**	**26.6%**



FY 2008 TOTAL EXPENDITURES BY CONTRACT SERVICE AGENCY

MONROE COUNTY

WORK ELEMENT	PROGRAMMED AMOUNT			SPENT AMOUNT			REMAINING BALANCE			EXPENDITURES RATIO	
	PL/FTA	Local	Total	PL/FTA	Local	Total	PL/FTA	Local	Total	Spent	Unspent
402	$ 8,800.00	$ 2,200.00	$ 11,000.00	$ 7,170.51	$ 1,792.63	$ 8,963.14	$ 1,629.49	$ 407.37	$ 2,036.86	81.5%	18.5%
TOTALS	$ 8,800.00	$ 2,200.00	$ 11,000.00	$ 7,170.51	$ 1,792.63	$ 8,963.14	$ 1,629.49	$ 407.37	$ 2,036.86	81.5%	18.5%

CITY OF BLOOMINGTON

WORK ELEMENT	PROGRAMMED AMOUNT			SPENT AMOUNT			REMAINING BALANCE			EXPENDITURES RATIO	
	PL/FTA	Local	Total	PL/FTA	Local	Total	PL/FTA	Local	Total	Spent	Unspent
203	$ 16,000.00	$ 4,000.00	$ 20,000.00	$ -	$ -	$ -	$ 16,000.00	$ 4,000.00	$ 20,000.00	0.0%	100.0%
401	$ 27,200.00	$ 6,800.00	$ 34,000.00	$ 19,151.43	$ 4,787.86	$ 23,939.29	$ 8,048.57	$ 2,012.14	$ 10,060.71	70.4%	29.6%
402	$ 8,800.00	$ 2,200.00	$ 11,000.00	$ 9,633.85	$ 2,408.46	$ 12,042.31	$ (833.85)	$ (208.46)	$ (1,042.31)	109.5%	-9.5%
TOTALS	$ 52,000.00	$ 13,000.00	$ 65,000.00	$ 28,785.28	$ 7,196.32	$ 35,981.60	$ 23,214.72	$ 5,803.68	$ 29,018.40	55.4%	44.6%

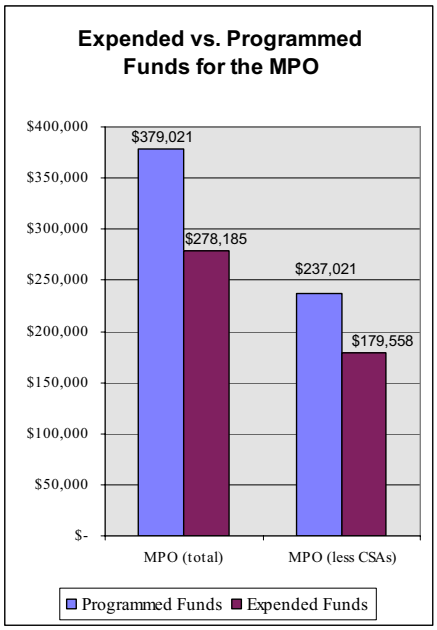
TOWN OF ELLETTSVILLE

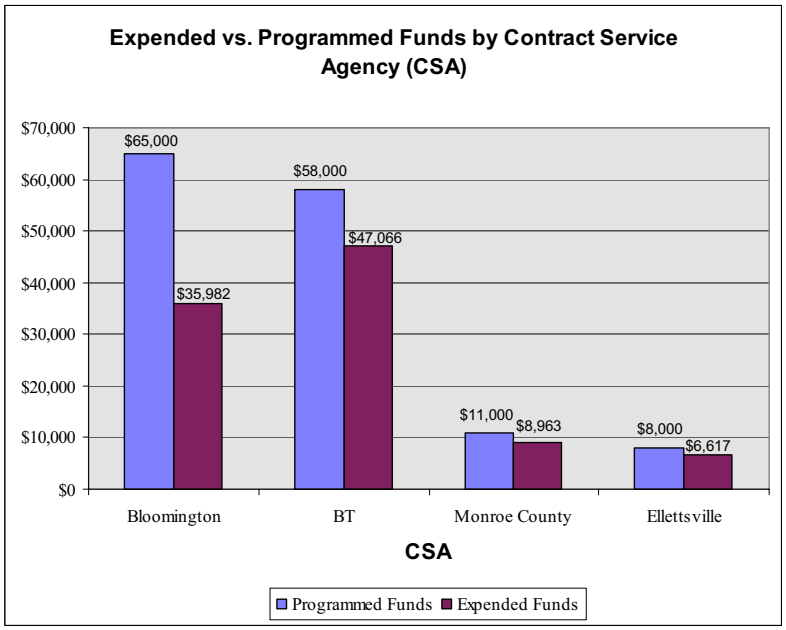
WORK ELEMENT	PROGRAMMED AMOUNT			SPENT AMOUNT			REMAINING BALANCE			EXPENDITURES RATIO	
	PL/FTA	Local	Total	PL/FTA	Local	Total	PL/FTA	Local	Total	Spent	Unspent
401	$ 3,200.00	$ 800.00	$ 4,000.00	$ 2,224.37	$ 556.09	$ 2,780.46	$ 975.63	$ 243.91	$ 1,219.54	69.5%	30.5%
402	$ 3,200.00	$ 800.00	$ 4,000.00	$ 3,069.00	$ 767.25	$ 3,836.25	$ 131.00	$ 32.75	$ 163.75	95.9%	4.1%
TOTALS	$ 6,400.00	$ 1,600.00	$ 8,000.00	$ 5,293.37	$ 1,323.34	$ 6,616.71	$ 1,106.63	$ 276.66	$ 1,383.29	82.7%	17.3%

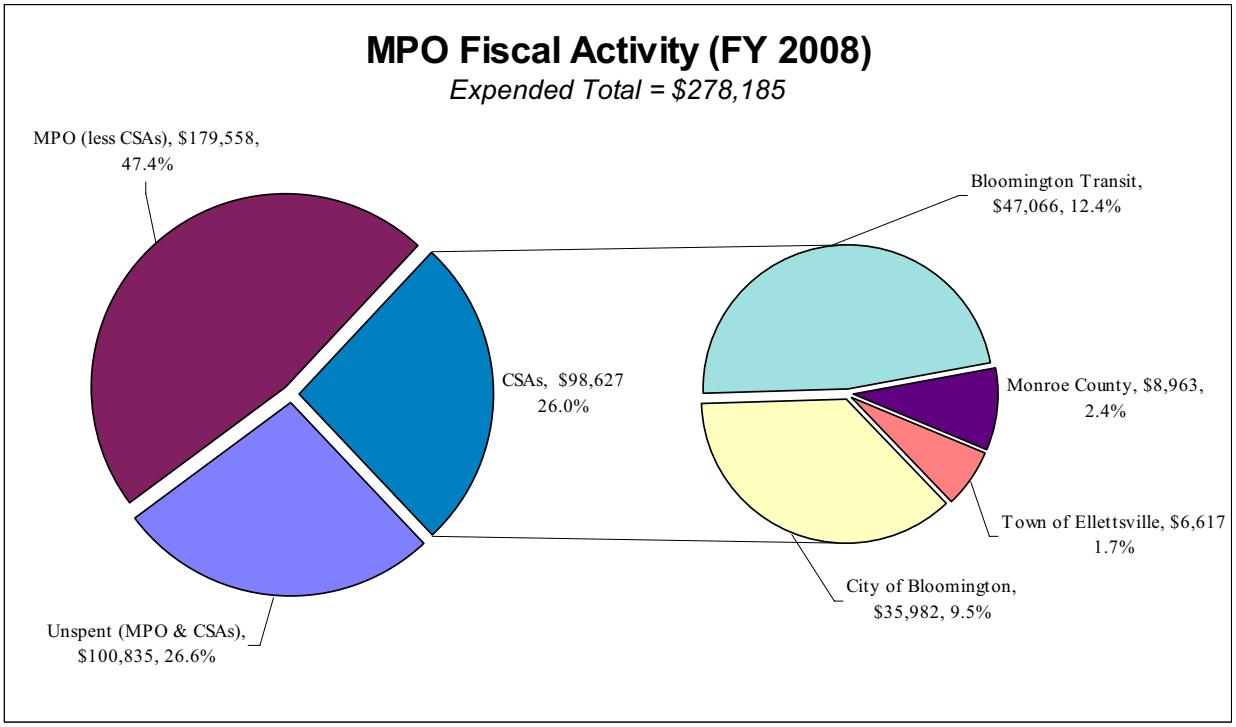
BLOOMINGTON TRANSIT

WORK ELEMENT	PROGRAMMED AMOUNT			SPENT AMOUNT			REMAINING BALANCE			EXPENDITURES RATIO	
	PL/FTA	Local	Total	PL/FTA	Local	Total	PL/FTA	Local	Total	Spent	Unspent
501	$ 2,400.00	$ 600.00	$ 3,000.00	$ 1,576.58	$ 394.14	$ 1,970.72	$ 823.42	$ 205.86	$ 1,029.28	65.7%	34.3%
502	$ 44,000.00	$ 11,000.00	$ 55,000.00	$ 36,076.23	$ 9,019.06	$ 45,095.29	$ 7,923.77	$ 1,980.94	$ 9,904.71	82.0%	18.0%
TOTALS	$ 46,400.00	$ 11,600.00	$ 58,000.00	$ 37,652.81	$ 9,413.20	$ 47,066.01	$ 8,747.19	$ 2,186.80	$ 10,933.99	81.1%	18.9%

FY 2008 TOTAL EXPENDITURES BY CONTRACT SERVICE AGENCY







INDIANA DEPARTMENT OF TRANSPORTATION
Driving Indiana's Economic Growth

100 North Senate Avenue
Room N955
Indianapolis, Indiana 46204-2219 (317) 232-6602 FAX: (317) 232-1499

Mitchell E. Daniels, Jr., Governor
Karl B. Browning, Commissioner

DES. #:9902910
PROJ. #: 9902910

LEGAL NOTICE

OF

PLANNED IMPROVEMENT

The Indiana Department of Transportation (INDOT) is developing plans for the proposed improvements to State Road (SR) 45 from Peter Ellis/Range Road to Russell Road. The project is located on the east side of the City of Bloomington from 0.36 mile to 1.34 miles east of SR 46 in Monroe County. The total project length is about 0.98 mile.

The improvements to SR 45 are proposed to provide auxiliary turn lanes and passing blisters at intersections and commercial driveways and curb lanes in each direction for bicycle traffic. These improvements will include widening on both sides from just west of John Hinkle Place to Barrington Drive and completing connections between sidewalks on both sides of the roadway. The roadway will be lowered between Woodbridge Drive and just west of Smith Road. Curb and sidewalks will be placed along the entire length. The widened pavement will be marked for auxiliary lanes and passing blisters as needed.

From east of Smith Road to just east of Russell Road the SR 45 pavement will be widened and new curb and sidewalks will be installed on the south side. The Russell Road intersection will be realigned to intersect SR 45 to the east of its existing intersection in order to provide a more direct (perpendicular) approach. A left turn lane is proposed to be provided on SR 45 at. John Hinkle Place/Woodbridge Drive, Grandview Drive and Tamarron Drive/E Deckard Road. Drainage will be through storm sewers at Grandview Drive from east of Grandview to west of Smith Road and between Smith Road and Russell Road.

Construction of the project will require approximately 1.3 acres of new permanent right-of-way. No new right-of-way will be required at the Smith Road intersection. Retaining Walls on the north and south sides of SR 45 between Grandview and Indiana Creek will minimize the amount of new right-of-way. No right-of-way will be required from the gas station and commercial property located on the east side of the intersection at Smith Road. No displacement of residents or businesses will be involved with this project. The SR 45 roadway is expected to be open to traffic during the construction period. However the traffic on Grandview Drive is expected to require a detour during construction.

Total cost of the project is estimated at $5,000,000. At present, we are planning to use both state and federal funds for construction of the project. However construction of the project is contingent upon available funding.

The Federal Highway Administration and the Indiana Department of Transportation have agreed that this project falls within the guidelines of a Categorical Exclusion Level 3 with no effect to wetlands in the project area.

The environmental document is being made available for review in the following offices.

1. Planning Department, Indiana Department of Transportation District at 185 Agrico Lane, Seymour, Indiana 47274, Phone # (812) 522-5649
2. Hearings Examiner, Room N955 of the Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2219, Phone # (317) 232-6601
3. Bloomington City Engineer, 401 N Morton Street, Bloomington, Indiana, 47404, Phone # (812) 349-3417

All interested persons may request a public hearing or express their concerns by submitting comments to the attention of Rebecca Pyland, Program Coordinator at INDOT, Room N955, 100 North Senate Avenue, Indianapolis, Indiana 46204-2219 on or before Wednesday, August 13, 2008.

If a hearing is determined to be in the best interest of the public, a notice will be advertised with the date, time, and place. Otherwise, any comments or materials received for the record will be considered in the decision-making process.

This notice is published in compliance with Title 23, Code of Federal Regulations, Section 771.111(h) entitled "Early Coordination, Public Involvement and Project Development", and the Indiana Public Involvement/Public Hearing Procedures for Federal-Aid Project Development approved by the Federal Highway Administration, U.S. Department of Transportation on July 8, 1997.

INDOT's Public Hearings Office is pleased to announce the availability of public notice via e-mail through our Public Notice List Serve. By subscribing to this service, you will be notified via e-mail each week, of any INDOT project related activities (i.e. public hearings/meetings, any planned highway improvements projects, notices of intent for highway construction and other notices sent through the agency's Public Hearings Office. In order to subscribe, simply visit the INDOT website at www.in.gov/dot and click on the **"Public Involvement / Media"** tab on the left side of the page. You will then click on **"INDOT List Serve Information"** and then scroll down to the **"Public Notices"** link then click to subscribe to this service. Simply enter your e-mail address as instructed then press **"submit"**. You will receive a confirmation e-mail stating you have successfully subscribed to the Public Notice List Serve. You may also access the list serve subscription form by directly visiting this page: http://lists.in.gov/mailman/listinfo/indot-legalnotices.

INDIANA DEPARTMENT OF TRANSPORTATION
Rebecca L. Pyland
Program Coordinator
Phone # (317) 232-6602
E-Mail: RPYLAND@indot.IN.gov
Website: www.in.gov/dot

BLOOMINGTON • MONROE COUNTY
mpo

August 8, 2008

Ms. Rebecca L. Pyland
INDOT – Division of Planning & Production
100 N. Senate, IGCN #N955
Indianapolis, IN 46204-2219

RE: Request for a Public Hearing for the SR 45 project from Pete Ellis/Range Rd. to Russell Rd. (DES# 9902910)

Ms. Pyland,

Please accept this letter as a formal request from the Bloomington/Monroe County Metropolitan Planning Organization (BMCMPO) to the Indiana Department of Transportation to schedule a public hearing for the State Road 45 project from Pete Ellis/Range Road to Russell Road (DES# 9902910).

The State Road 45 corridor transects the Metropolitan Planning Area and is of significant interest to the BMCMPO, its committees, and the local public agencies within its jurisdiction. The BMCMPO believes that a public hearing is necessary so that the project can be designed to meet the needs of both the local population as well as the needs of the State's transportation infrastructure system.

On behalf of the BMCMPO, I sincerely appreciate your consideration in this matter. Please advise if additional information is required of the BMCMPO in the facilitation of this request.

Sincerely,

Josh Desmond, AICP
BMCMPO Director
mpo@bloomington.in.gov

cc: File

401 N. Morton Street • Suite 160 • PO Box 100 • Bloomington, IN 47402 • Ph: (812) 349-3423 • Fx: (812) 349-3535
www.bloomington.in.gov/mpo • mpo@bloomington.in.gov

BMCMPO Draft Complete Streets Policy
Working Outline: June 25, 2008(version 3)

WHEREAS, it is the intent of the Bloomington Monroe County Metropolitan Planning Organization (BMCMPO) to be compliant with the Complete Streets Act of 2008; and

WHEREAS, the BMCMPO has prioritized development of a truly multi-modal system in the Vision Statement of the currently adopted Long Range Transportation Plan; and

WHEREAS, the BMCMPO's Transportation Improvement Program (TIP) identifies implementation of capital improvements in the urbanized area; and

WHEREAS, the civic guidance of the Citizens Advisory Committee and the technical expertise of the Technical Advisory Committee can ensure that investment in transportation infrastructure is addressing the needs of all users of a corridor;

NOW, THEREFORE, BE IT RESOLVED THAT THE POLICY COMMITTEE OF THE BLOOMINGTON MONROE COUNTY METROPOLITAN PLANNING ORGANIZATION HEREBY ADOPTS THIS COMPLETE STREETS POLICY HEREIN CONTAINED, ON THIS DATE XX, XX, 2008.

Introduction
The Complete Streets concept is an international initiative to design and build roads that adequately accommodate all users of a corridor, including motor vehicles, pedestrians, bicyclists, users of mass transit, people with disabilities, and adjacent land users. These concepts can be adapted to fit local community needs and used as a policy to direct future transportation planning. A policy using Complete Streets concepts will incorporate community values and qualities including environment, scenic, aesthetic, historic and natural resources, as well as safety and mobility. With few exceptions, it demands careful multi-modal evaluation for all transportation corridors together with the integration of best management strategies in land use and transportation planning that supports compact sustainable development.

This Policy is written to empower and direct citizens together with planners, consultants, engineers, and architects to utilize an interdisciplinary approach to incorporate complete streets concepts into the design and construction of all transportation projects within the Bloomington and Monroe County Metropolitan Planning Organization.

Section I: Purpose

The Bloomington/Monroe County Metropolitan Organization (BMCMPO) will require the planning for, design and construction of all transportation improvement projects under the principle of inclusion. This principle dictates that appropriate accommodation for pedestrians, bicyclists, transit riders, persons of all abilities and ages, motorists, and freight providers will be considered so that all modes of transportation can function

safely and independently in current and future conditions as anticipated by the Long Range Transportation Plan (LRTP) or any other relevant long range planning documents.

The principle of inclusion establishes the necessary framework to implement a complete streets policy into the transportation planning process. This policy will ensure that the entire right-of-way is designed and operated to enable safe access for all users and that all transportation agencies participating in the BMCMPO adhere to implementing the principles of inclusion in all transportation projects appropriate to the local context and needs.

The Complete Streets Policy aims to:

- Ensure that the safety and convenience of all users of the transportation system shall be accommodated
- Apply such policies to the projects contained in the Transportation Improvement Program
- Incorporate the principals in this policy into all aspects of the transportation project development process, including project identification, scoping procedures and design approvals, as well as design manuals and performance measures
- Construct transportation corridors that serve all users including pedestrians, bicyclists, transit users, and travelers of all ages and abilities;
- Create a comprehensive, integrated, and connected transportation network
- Ensure the use of the latest and best design standards;
- Recognize the need for flexibility to accommodate different types of streets (including but not limited to rural, urban, suburban, arterials, collectors, neighborhood connecting, cueing or skinny) and users;
- Direct the complete street design solutions to fit in with the context of the community.

(CAC reached consensus on 6/25/2008 to preliminarily adopt the policy up to this point in the document)

Section II: Policy

All capital roadway improvement projects and future projects which are programmed to use federal funding as identified in the Transportation Improvement Program (TIP) shall apply a Complete Streets Framework, as detailed in Section I above, for aspects related to the planning, design, and construction of these improvement projects. Furthermore, the policy requires (Fed Draft Legislation):

- All users of the transportation system will include pedestrians (including individuals of all ages, and individuals with disabilities (including mobility, sensory, neurological or hidden disabilities), bicyclists, transit vehicles and users, and motorists.
- Application of said policy to both new construction and reconstruction (including resurfacing, restoring, and rehabilitation (3R) projects)

improvement projects. Simple improvements, such as re-striping for bicycle and pedestrian accommodation, may be encouraged in pavement resurfacing projects when they fall within the overall scope of the original roadwork.

- Accommodations to be made for all users in all construction and improvement projects unless the BMCMPO Policy Committee approves any specified exceptions from implementing the policy statement, including documentation with supporting data that indicates the basis for the exemption (see exemption section below).
- The use of current design standards, including those standards applying to access for individuals with disabilities.
- Complete street solutions to be developed to fit in with the context of the community and that those solutions be flexible.
- A description of the performance standards with measurable outcomes that will be developed.
- The BMCMPO to certify each road project included in the Transportation Improvement Plan (TIP) has been reviewed for its compliance with any applicable Complete Streets Policy statement and that each project within the TIP enhances the safety, convenience, and accessibility of the transportation system for all users to the extent that is reasonably possible and that the project applicant (implementer) addressed concerns in the material prepared for public input with respect to the TIP.

The complete streets process is as follows:

Project Planning: develop a planning process for all/new and/or other transportation related projects to identify current and future needs.

- One example developed a multi-modal corridor map to identify high priority corridors to implement complete streets
- Other examples include all streets

Project Design: develop a design review process to ensure the project is compliant with this complete street policy (most guidance suggests not to develop specific design standards – but may want to consider important design elements to consider such as street trees, public areas, grass plots, buffers, etc.). This process would include review by various transportation providers and BMCMPO partners which is to occur at the beginning and throughout the project design process (develop a project review sub-committee)

Project Implementation/Approval: Applicable projects listed in the TIP (may need a grandfather clause for projects that have completed design) must be complete street compliant as specified by this policy. Adoption of the TIP is a required action of the Policy Committee. The Policy Committee shall certify by resolution that relevant projects identified in the TIP are complete street compliant unless a project receives an exemption under unusual and extraordinary circumstances. All project phases and associated components of projects shall be compliant.

Complete Street Exemption: The complete streets policy requires that the BMCMPO Policy Committee certify through resolution that justification exists if all modes of transportation are NOT accommodated for a specified project as identified in the TIP. Therefore, the Policy Committee may allow an exemption under unusual and extraordinary circumstances using the following guidelines:

- Ordinary maintenance activities designed to keep assets in serviceable condition (e.g. mowing, cleaning, sweeping, spot repair, and regular/seasonal maintenance)
- The project involved a roadway on which bicyclists and pedestrians are prohibited by law from using. In such case, a greater effort shall be made to accommodate bicyclists and pedestrians elsewhere.
- There are extreme topographic or natural resource constraints
- The LRTP (25 year projection) Average Daily Traffic is projected to be less than 1000 (more/less) vehicles per day
- When other available means or factors indicate an absence of need presently and in the 25 year horizon
- The project is not identified as a priority multimodal corridor (would need to develop a map for this option)
- A reasonable and equivalent alternative is programmed in the TIP as a separate project.

Section III: Implementation

Staff Training – develop a technical training program for local transportation providers, BMCMPO staff, and BMCMPO partners

Benchmarks and Performance Measures – develop key benchmarks to attain in the short, medium, and long-term. Develop annual/other performance measures (e.g. training sessions, design guidelines, other). Look to base performance measures on LRTP vision statement.

Data Collection – develop tools to measure and track how well streets are serving all uses (e.g. pedestrian LOS, crash report, and other tools)

MEMORANDUM

To: MPO Citizens Advisory Committee Members

From: Raymond Hess, AICP
Senior Transportation Planner

Date: August 15, 2007

Re: Mass Transit Grant Programs

Background

On August 8, 2008 the Indiana Department of Transportation (INDOT) released the applications and guidelines for two funding sources for mass transit: the New Freedom Program, and the Job Access and Reverse Commute Program (JARC). Applications from urbanized areas must be submitted by the Metropolitan Planning Organizations no later than September 19, 2008.

Job Access and Reverse Commute Program (JARC) (Section 5316)

Available Funding: $767,883

The JARC Program is intended to support the development and maintenance of job-related transportation services for welfare recipients and eligible low-income individuals. JARC Program Federal funds can fund 80% of capital expenses and/or 50% of operating expenses. All projects must be derived from a local Coordinated Plan.

Bloomington Transit was successful in procuring $200,000 from the JARC program last year which extended its service hours for its downtown routes. Service was extended until 11:35pm for Routes 1, 2, 3, 4, and 5. Bloomington Transit wishes to apply again this year to continue this same service. The application is anticipated to request ~$208,000 in JARC funding.*

New Freedom Program (Section 5317)

Available Funding: $449,801

The focus of the New Freedom Program is to provide improved transportation services and public transportation alternatives for people with disabilities. These services extend beyond those required by the American with Disabilities Act (ADA). New Freedom Program Federal funds can fund 80% of capital expenses and/or 50% of operating expenses. All projects must be derived from a local Coordinated Plan.

Bloomington Transit was successful in procuring $25,000 from the New Freedom program last year which extended its paratransit service, BT Access, until 11:35pm. Additionally, Bloomington Transit extended its paratransit coverage area to the entire City during all hours of operation. Bloomington Transit wishes to apply again this year to continue these same services. The application is anticipated to request ~$26,000 in New Freedom funding.*

Requested Action

The Citizens Advisory Committee is requested to make a positive recommendation to the Policy Committee enabling Bloomington Transit to apply for the aforementioned JARC and New Freedom grant funding.

*Note: At the time this memo was written, exact details on project costs had not yet been calculated.

MEMORANDUM

To: MPO Citizens Advisory Committee Members

From: Raymond Hess, AICP
Senior Transportation Planner

Date: August 15, 2007

Re: Regional Intelligent Transportation Systems Architecture

Background

National transportation legislation has mandated development of a plan which identifies how technology can be integrated into the transportation network to improve safety or alleviate congestion. This plan is referred to as a Regional Intelligent Transportation System Architecture.

One of the main features of ITS is relaying information to government/emergency services agencies and the general public in real-time. ITS technology allows for instant access to such things as roadway weather and traffic conditions. They can also be used for accurate incident reporting, efficient congestion mitigation, public safety alerts and expedited emergency vehicle dispatch.

ITS and the BMCMPO

ITS efforts began as early as 2004. Development of a Regional Architecture languished due to staff turnover, higher priorities, and an apparent lack of funding to implement ITS projects. However, Federal Highway Administration personnel have indicated that the lack of a regional architecture for this area may result in negative impacts to project funding identified in the Transportation Improvement Program.

Over the last several months, interviews with relevant stakeholders have been conducted. This information was entered into an ITS database, known as Turbo Architecture, which developed the backbone of the Regional ITS Architecture. The outputs from this program were integrated into a draft Regional ITS Architecture document (attached).

Regional Intelligent Transportation System Architecture

Draft

August 15, 2008

BLOOMINGTON • MONROE COUNTY mpo

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Table of Contents

Acknowledgements

The following people are recognized by the Bloomington/Monroe County Metropolitan Planning Organization for their participation, assistance, and contributions in the development of the Regional ITS Architecture:

Public Safety
Tony Bowlen, Town Marshall (Ellettsville Town Marshall)
Pat Bucher, Luiteant (Indiana State Police)
James R. Davis, Chief (Ellettsville Fire Department)
Dave DeGroote, Director (Bloomington Hospital Ambulance Service)
Mike Diekhoff, Chief (Bloomington Police Department)
John Hooker III, Director (Monroe County Emergency Management)
Roger Kerr, Chief (Bloomington Fire Department)
Scott Melinger, Deputy Sheriff (Monroe County Sheriff Department)
Jerry Minger, Captain (Indiana University Police)
Jeff Schemmer, Coordinator (Monroe County Central Dispatch)

Transit
Perry Maul, Operations Manager (Indiana University Campus Bus)
Lew May, Manager (Bloomington Transit)
Kent McDaniel, Director (Indiana University Transportation Services)
Norm Richardson, Operations Manager (Rural Transit)

Transportation Infrastructure
Frank Nierzwicki, Director (Town of Ellettsville Planning Department)
Karen Stippich, Traffic Operations/ITS Engineer (Federal Highway Administration)
Meggan Simpson, Operations Engieer (Indiana Department of Transportation)
Adrian Reid, Engineer (City of Bloomington)
Bill Williams, Director (Monroe County Highways)
Steve Wuertz, Traffic Management Program Coordinator (Indiana Department of Transportation)

A special thank you is extended to the Northeastern Indiana Regional Coordinating Council (NIRCC) for providing BMCMPO staff with the Allen County Regional ITS Architecture *which served as the model for development of this architecture.*

I. Introduction

Rapid advances in technology have created many new opportunities for transportation professionals to deliver safer and more efficient transportation services. However, many of these new opportunities are predicated upon effective coordination between organizations - at both an institutional and technical level. To encourage this coordination, the USDOT developed the National Intelligent Transportation Systems (ITS) Architecture to help identify and exploit these opportunities for cost-effective cooperation.

In 1997, Congress passed the Transportation Equity Act for the 21st Century (TEA-21) to address the need to begin to work toward regionally integrated transportation systems. In January 2001, FHWA published a rule (ITS Architecture and Standards) and the FTA published a companion policy to implement section 5206(e) of TEA-21. This Rule/Policy seeks to foster regional integration by requiring that all ITS projects funded from the Highway Trust Fund be in conformance with the National ITS Architecture and appropriate standards. "Conformance with the National ITS Architecture" is defined in the final Rule/Policy as using the National ITS Architecture to develop a "regional ITS architecture" that would be tailored to address the local situation and ITS investment needs, and the subsequent adherence of ITS projects to the regional ITS architecture.

The Bloomington/Monroe County Metropolitan Planning Organization's (BMCMPO) Regional ITS Architecture has been developed to serve as a roadmap for transportation systems integration for the BMCMPO's Metropolitan Planning Area (MPA) over the next 5 years. The architecture is a cooperative effort by the transportation and public safety agencies that provide service within Metropolitan Planning Area. The architecture illustrates how each agency's systems will work together in the future to provide a safer and more efficient transportation system for the traveling public in the BMCMPO's Metropolitan Planning Area.

II. Development of Regional Architecture

The development of the Regional ITS Architecture was initiated as early as 2004. However, ITS development languished until 2008 due to staff turn-over, higher priority issues which took precedent, and an absence of additional funding to implement ITS projects. Development of the Regional ITS Architecture is of increasing importance because ITS-type technologies are becoming increasingly affordable and more obtainable to smaller local public agencies, thus enabling them to achieve increased safety and efficiency of the transportation network.

The Bloomington/Monroe County Metropolitan Planning Organization, which serves the metropolitan area in Monroe County, took the lead role in the development of the architecture. The BMCMPO took responsibility for the creation of the regional architecture database, which was done using Turbo Architecture Software, and the regional architecture document (this document). The development of the regional architecture was done through the coordination of numerous stakeholders.

III. Description of the Region and the Scope of the Architecture

Description of the Region

The Metropolitan Planning Area is the region that the Bloomington/Monroe County Metropolitan Planning Organization Regional ITS Architecture serves (refer to Appendix A). The region encompasses approximately 57 square miles inclusive all of the City of Bloomington, all of the Town of Ellettsville, and parts of Monroe County. The population of this area is estimated to be nearly 98,500 based upon the 2000 Census.

Definition of the Scope

The Regional ITS Architecture provides a five year look at the ITS activities in the Bloomington Monroe County Metropolitan Planning Area. The architecture addresses the ITS systems that currently exist and those that are planned for development over the next five years. It should be noted however, that this architecture also identifies ITS elements which may be planned beyond this five year horizon if they are specifically identified by a stakeholder in official documents.

This architecture will provide a look at anticipated projects based on the information from the stakeholders. Frequent administratively processed updates will be required to maintain an accurate representation of the region. The ITS services covered in this architecture include those associated with freeway management, maintenance and construction operations, arterial/traffic management, emergency management, and public transportation.

IV. Identification of Stakeholders

Stakeholders are essential to a regional architecture. The architecture represents how the ITS systems that the stakeholders operate (both existing and planned) are linked together to provide safe and efficient transportation. The regional architecture for Bloomington Monroe County Metropolitan Planning Area consists of seven (7) stakeholders that represent the area transportation departments, public transportation, and the public safety agencies. It is important to note that in order to simplify the architecture, certain stakeholders were grouped together. In particular, public safety agencies and transit were identified as groups of stakeholders. Table 1 identifies and provides a description of the stakeholders that are included in the architecture.

Table 1: Stakeholders

Stakeholder Name	Stakeholder Description
Bloomington/Monroe County Metropolitan Planning Organization	The BMCMPO is the Metropilitan Planning Organization that provides regional transportation planning to the City of Bloomington, the Town of Ellettsville, and parts of Monroe County.
City of Bloomington	The City of Bloomington is the stakeholder that consists of all City departments that provide transportation related services for all physical transportation infrastructure in Bloomington.
Indiana Department of Transportation	The Indiana Department of Transportation (INDOT) is the stakeholder responsible for the State's transportation infrastructure including state roads, US routes, and interstate routes within Monroe County. This includes all divisions of INDOT that serve BMCMPO.

Table 1: Stakeholders (continued)

Stakeholder Name	Stakeholder Description
Monroe County	Monroe County is the stakeholder responsible for all bridges in the BMCMPO as well as the physical transportation infrastructure in unincorporated areas. This includes all divisions within Monroe County Government associated with transportation, such as Highways and Highway Maintenance.
Public Safety Agencies	Public Safety Agencies include stakeholders from police, fire, EMS, and Emergency Management, including but not limited to; Indiana State Police, Monroe County County Sheriff, Bloomington Police Department, Town of Ellettsville Town Marshal, Indiana University Police Department, Bloomington Fire Department, Ellettsville Fire Department, Bloomington Hospital Ambulence Service, Monroe County Emergency Management, and Monroe County Central Dispatch. This group of public safety agencies has emergency response protocols as coordinated by Monroe County Emergency Management.
Town of Ellettsville	The Town of Ellettsville is the stakeholder responsible for roads within town limits. This includes Streets & Planning Depts. which are charged with maintenance and construction operations.
Transit Agencies	Transit agencies are the stakeholders responsible for all mass transit in the BMCMPO metropolitan planning area. This includes Bloomington Transit, Rural Transit, and IU Campus Bus Service.

V. Operational Concept

An Operational Concept identifies each stakeholder's current and future roles and responsibilities in the operation of the regional ITS system. The operational concept documents these roles and responsibilities across a range of transportation services. The services covered are:

- Emergency Management: the development of systems to provide emergency call taking, public safety dispatch, and emergency operations center operations.
- Freeway Control: the development of systems to monitor freeway (or tollway) traffic flow and roadway conditions, and provide strategies such as ramp metering or lane access control to improve the flow of traffic on the freeway. Includes systems to provide information to travelers on the roadway.
- Incident Management: the development of systems to provide rapid and effective response to incidents. Includes systems to detect and verify incidents, along with coordinated agency response to the incidents.
- Maintenance and Construction Management: the development of systems to manage the maintenance of roadways in the region, including winter snow and ice clearance. Includes the managing of construction operations.
- Surface Street Management: the development of systems that provide surveillance of the network, manages traffic, and disseminate information to network users.
- Transit Management: the development of systems to more efficiently manage fleets of transit vehicles or transit rail. Includes systems to provide transit traveler information both pre-trip and during the trip.

- Traveler Information: the development of systems to provide static and real time transportation information to travelers.

Table 2 illustrates the operational concept for the regional architecture.

Table 2: Operational Concept

Transportation Service	Stakeholder	Role/Responsibility
Emergency Management	Public Safety Agencies	▶ Provide emergency call taking
		▶ Dispatch appropriate agency(s) to incidents
		▶ Coordinate various systems and agencies during emergencies
Freeway Control	INDOT	▶ Operate traffic information devices (DMS, HAR)
		▶ Monitor traffic conditions
Incident Management	INDOT	▶ Operate Freeway Service Vehicles
		▶ Provide information to travelers using traffic information devices (DMS, HAR)
		▶ Provide assistance to Public Safety Agencies responding to incidents on roads under INDOT's jurisdiction
	Public Safety Agencies	▶ Receive emergency calls for incidents
		▶ Dispatch appropriate agency(s) to incidents
Maintenance and Construction Management	INDOT	▶ Provide maintenance of State Roads, US Routes, and Interstate Routes
		▶ Coordinate with other agencies that provide maintenance and construction
	Monroe County	▶ Provide maintenance of County Roads and bridges.
		▶ Coordinate with other agencies that provide maintenance and construction
	City of Bloomington	▶ Provide maintenance of City streets
		▶ Coordinate with other agencies that provide maintenance and construction
	Town of Ellettsville	▶ Provide maintenance of Town streets
		▶ Coordinate with other agencies that provide maintenance and construction

Table 2: Operational Concept (continued)

Transportation Service	Stakeholder	Role/Responsibility
Surface Street Management	City of Bloomington	▶ Collect data using roadside devices
	Monroe County	▶ Collect data using roadside devices
Transit Management	Transit Agencies	▶ Provide fixed route bus service
		▶ Provide demand response (paratransit) bus service
		▶ Monitor transit assets (vehicle locations, video surveilance)
Traveler Information	INDOT	▶ Provide information to drivers (DMS, HAR)

VI. Inventory

Each Stakeholder is responsible for ITS systems in the region. A regional ITS architecture inventory is a list of the elements that represent the existing and planned ITS systems in the region as well as non-ITS systems that provide information to or get information from the ITS systems. An element is the basic building block of the Regional ITS Architecture and describes a system or piece of a system. The Regional ITS Architecture for Bloomington/Monroe County metropolitan planning area contains twenty-five (25) elements, consisting of systems and subsystems that are either related to the systems or stand alone. These elements are listed below and explained further in Tables 3 and 4:

Elements

Bloomington Maintenance and Construction
- Bloomington Roadside Equipment
- Bloomington Vehicles

Ellettsville Maintenance and Construction

Emergency Dispatch Center
- Emergency Personnel
- Emergency Vehicles

INDOT Operations and Construction
- INDOT Personnel
- INDOT Roadside Equipment
- INDOT Vehicles

INDOT Traffic Management Center

Monroe County Maintenance and Construction
- Monroe County Roadside Equipment
- Monroe County Vehicles

Transit Operations
- Transit Operations Kiosks
- Transit Personnel
- Transit Vehicles

Remote Traveler Support

Security Monitoring Field Equipment

Transportation Data

User Personal Computing Devices

Elements (continued)
Weather Services
Media

The inventory has been presented in two different manners. Table 3 sorts the inventory by stakeholder. The table lists the stakeholders, their associated elements, an element description, and whether the element exists or is planned. Table 4 sorts the inventory by entity. Each element in the regional architecture is mapped to one or more entities from the National ITS Architecture. The table lists the entity, the element and stakeholder, and whether the element exists or is planned.

Table 3: Inventory Sorted by Stakeholder

Stakeholder	System/Element	Description	Status
City of Bloomington	Bloomington Maintenance & Construction	Coordinates all construction and maintenance activities on roads unders the City's jurisdiction	Existing
	Bloomington Roadside Equipment	Roadside Equipment includes any and all equipment distributed on and along the roadway which monitors and/or controls traffic. Bloomington Roadside Equipment includes sensors, displays, and cameras for operational purposes of maintenance, operation, construction, and data collection..	Existing
	Bloomington Vehicles	Vehicles include ITS devices that provide the sensory, processing, storage, and communications functions necessary to support highway maintenance and construction.	Existing
Town of Ellettsville	Ellettsville Maintenance and Construction	Ellettsville coordinates all construction and maintenance activities on Town streets.	Existing
Public Safety Agencies	Emergency Dispatch Center	Monroe County Central Dispatch receives 911 calls in Monroe County and is responsible for the deployment of the appropriate emergency response personnel.	Existing
	Emergency Personnel	Personnel represent the people who directly interface with an element of the ITS infrastructure. They provide operator data and command inputs to direct systems operations to varying degrees, depending on the type of system and the deployment scenario.	Existing
	Emergency Vehicles	Emergency vehicles include ITS equipment that provides the sensory, processing, storage, and communications functions necessary to support safe and efficient emergency response.	Existing

Table 3: Inventory Sorted by Stakeholder (continued)

Stakeholder	System/Element	Description	Status
INDOT	INDOT Operations and Construction	INDOT Operations and Construction coordinates maintenance and construction activities on roads under INDOT's jurisdiction in Monroe County.	Existing
	INDOT Personnel	Personnel represent the people who directly interface with an element of the ITS infrastructure. They provide operater data and command inputs to direct systems operations to varying degrees, depending on the type of system and the deployement scenario.	Existing
	INDOT Roadside Equipment	Roadside Equipment includes any and all equipment distributed on and along the roadway which monitors and controls traffic.	Planned
	INDOT Traffic Management Center	INDOT's Indianapolis Traffic Management Center coordinates ITS activities associated with freeways within the BMCMPO in association with INDOT's Seymour District Office.	Planned
	INDOT Vehicles	Vehicles include ITS devices that provide the sensory, processing, storage, and communications functions necessary to support highway maintenance and construction.	Existing
Monroe County	Monroe County Maintenance and Construction	Monroe County Maintenance and Construction coordinates all construction and maintenance activities on roads under Monroe County's jurisdiction.	Existing
	Monroe County Roadside Equipment	Roadside Equipment includes any and all equipment distributed on and along the roadway which monitors and controls traffic. This can include sensors, displays, and cameras for operational purposes of maintenance and construction.	Planned
	Monroe County Vehicles	Vehicles include ITS devices that provide the sensory, processing, storage, and communications functions necessary to support highway maintenance and construction.	Existing
Public Transit Agencies	Remote Traveler Support	Remote traveler support provides access to traveler information at transit stations, transit stops, other fixed sites along travel routes (e.g., rest stops), and major trip generation locations.	Planned
	Security Monitoring Field Equipment	Security monitoring field equipment includes sensors and surveillance devices that monitor transportation infrastructure and public areas.	Existing
	Transit Operations	This element includes the systems necessary to run Bloomington Transit, Rural Transit, and IU Campus Transit.	Existing
	Transit Operations Kiosks	Kiosks are public informational displays supporting various levels of interaction and information access. Currently information kiosks for BT are staffed, as opposed to automated.	Planned
	Transit Personnel	Personnel represent the people who directly interface with an element of the ITS infrastructure. They provide operator data and command inputs to direct systems operations to varying degrees, depending on the type of system and the deployment scenario.	Existing
	Transit Vehicles	Transit vehicles include ITS devices that support the safe and efficient movement of passengers. These systems collect, manage, and disseminate transit-related information to the driver, operations and maintenance personnel, and transit system patrons.	Existing

Table 3: Inventory Sorted by Stakeholder (continued)

Stakeholder	System/Element	Description	Status
BMCMPO	Transportation Data	Transportation Data collects and stores transportation related data from various systems and transportation agencies within Monroe County.	Planned
N/A	User Personal Computing Devices	User Personal Computing Devices refers to equipment an individual owns and can personalize with their choices for information about transportation networks. An Internet-connected PC is an example.	Existing
N/A	Weather Services	Weather Services include the National Weather Service as well as private disseminators of weather data.	Existing
N/A	Media	The media element represents the information systems that provide traffic reports, travel conditions, and other transportation-related news services to the traveling public through radio, TV, and other media.	Existing

Table 4: Inventory Sorted by Entity

Entity	Systems/Element	Stakeholder	Status
Archived Data Management Subsystem	Transportation Data	BMCMPO	Planned
Emergency Management Subsystem	Emergency Dispatch Center	Public Safety Agencies	Existing
Emergency Vehicle Subsystem	Emergency Vehicles	Public Safety Agencies	Existing
Maintenance and Construction Management	Bloomington Maintenance and Construction	City of Bloomington	Existing
	Ellettsville Maintenance and Construction	Town of Ellettsville	Existing
	INDOT Operations and Construction	INDOT	Existing
	Monroe County Operations and Construction	Monroe County	Existing
Maintenance and Construction Vehicle Subsystem	Bloomington Vehicles	City of Bloomington	Existing
	INDOT Vehicles	INDOT	Existing
	Monroe County Vehicles	Monroe County	Existing
Personal Information Access Subsystem	User Personal Computing Devices	N/A	Existing
Remote Traveler Support Subsystem	Remote Traveler Support	INDOT	Planned
	Transit Operations Kiosks	Transit Agencies	Planned
Roadway Subsystem	Bloomington Roadside Equipment	City of Bloomington	Existing
	INDOT Roadside Equipment	INDOT	Existing
	Monroe County Roadside Equipment	Monroe County	Planned
Security Monitoring Subsystem	Security Monitoring Field Equipment	Transit Agencies	Existing
Traffic Management Subsystem	INDOT Traffic Management Center	INDOT	Planned
Transit Management Subsystem	Transit Operations	Transit Agencies	Existing
Transit Vehicle Subsystem	Transit Vehicles	Transit Agencies	Existing
Emergency System Operator	Emergency Personnel	Public Safety Agencies	Existing
Media	Media	N/A	Existing
Traffic Operations Personnel	INDOT Personnel	INDOT	Existing
Transit Operations Personnel	Transit Personnel	Transit Agencies	Existing
Weather Service	Weather Service	N/A	Existing

VII. Needs and Services

The ITS systems in the region provide a variety of transportation services that address the transportation needs of the region. These services will continue to grow as more systems are developed and upgraded. The regional needs include the need for safe and efficient transportation on the transportation network, the need for safe and efficient maintenance and construction activities, a need for safe and efficient public transit, a need for efficient and comprehensive emergency management, and the need for coordination between all of the needs listed above.

The services that address these needs are described by the market packages that are associated with each element. The market packages provide an accessible, service-oriented perspective to the regional architecture. They are tailored to fit, separately or in combination, with real world transportation problems and needs. Market packages identify the pieces of the architecture that are required to implement a particular transportation service.

Table 5 identifies the market packages for the region. The table identifies the market package, the associated element, and whether it is planned or existing.

Table 5: Market Packages

Market Package	Market Package Description	Element	Status
Transit Vehicle Tracking (APTS01)	Monitors current transit vehicle location using Automated Vehicle Location (AVL) System. Location data may be used to determine schedule adherence and update the schedule in real-time. A two-way wireless communication link with the Transit Management Subsystem is used for relaying vehicle position and control measures.The Transit Management Subsystem processes the information, updates the transit schedule and makes real-time schedule information available to the Information Service Provider.	Transit Operations	Existing
		Transit Vehicles	Existing
Transit Fixed-Route Operations (APTS02)	Performs automated dispatch and system monitoring for fixed-route and flexible-route transit services. This service performs scheduling activities including the creation of schedules, blocks and runs, as well as operator assignment. This service determines the transit vehicle trip performance against the schedule using AVL data and provides information displays at the Transit Management Subsystem. Static and real time transit data is exchanged with Information Service Providers where it is integrated with that from other transportation modes to provide the public with integrated and personalized dynamic schedules.	Transit Operations	Existing
		Transit Personnel	Existing
		Transit Vehicles	Existing

Tale 5: Market Packages (continued)

Market Package	Market Package Description	Element	Status
Demand Response Transit Operations (APTS03)	Performs automated dispatch and system monitoring for demand responsive transit services such as scheduling activities and operator assignment. This market package supports dynamic features of flexible-route transit services. This package monitors the current status of the transit fleet and supports allocation of fleet resources to service incoming requests for transit service while also considering traffic conditions. The Transit Management Subsystem provides the necessary data processing enabling optimal use of the transit fleet. This service includes the capability for a traveler request for personalized transit services to be made through the Information Service Provider (ISP) Subsystem; operated by either the transit management center or an independent service.	Transit Operations	Existing
		Transit Personnel	Existing
		Transit Vehicls	Existing
Transit Fare Collection Management (APTS04)	Manages transit fare collection on-board transit vehicles and at transit stops using electronic means. It allows transit users to use a traveler card or other electronic payment device. Readers located either in the infrastructure or on-board the transit vehicle allow electronic fare payment. Data is processed, stored, and displayed on the transit vehicle and communicated as needed to the Transit Management Subsystem.	Transit Operations	Planned
		Transit Operations Kiosks	Planned
		Transit Vehicles	Planned
Transit Security (APTS05)	Provides for the physical security of transit passengers and transit vehicle operators. On-board equipment is deployed to perform surveillance and sensor monitoring in order to warn of potentially hazardous situations. Transit user or transit vehicle operator activated alarms are provided on-board. Public areas are also monitored with similar surveillance and sensor equipment and provided with transit user activated alarms.This market package provides surveillance and sensor monitoring of non-public areas of transit facilities and transit infrastructure. The surveillance equipment includes video and/or audio systems.	Security Monitoring Field Equipment	Existing
		Transit Operations	Existing
		Transit Personnel	Existing
Transit Fleet Management (APTS06)	Supports automatic transit maintenance scheduling and monitoring. On-board condition sensors monitor system status and transmit critical status information to the Transit Management Subsystem. Hardware and software in the Transit Management Subsystem processes this data and schedules preventative and corrective maintenance. The market package also supports the day to day management of the transit fleet inventory, including the assignment of specific transit vehicles to blocks.	Transit Operations	Existing
		Transit Vehicles	Existing
Transit Traveler Information (APTS08)	Provides transit users at transit stops and on-board transit vehicles with ready access to transit information. The information services include transit stop annunciation, imminent arrival signs, and real-time transit schedule displays that are of general interest to transit users. Systems that provide custom transit trip itineraries and other tailored transit information services are also represented by this market package.	Media	Existing
		Transit Operations	Existing
		Transit Operations Kiosks	Planned
		Transit Vehicles	Existing
		User Personal Computing Devices	Existing

Table 5: Market Packages (continued)

Market Package	Market Package Description	Element	Status
Transit Signal Priority (APTS09)	Determines the need for transit priority on routes and at certain intersections and requests transit vehicle priority at these locations. Signal priority may result from coordination between the transit vehicle and the individual intersection for signal priority or may result from coordination between transit management and traffic management centers. Coordination is intended to improve on-time performance of transit if it can be accommodated without degrading overall performance of the traffic network.	Bloomington Roadside Equipment	Planned
		Transit Vehicles	Planned
Broadcast Traveler Information (ATIS01)	Collects traffic conditions, advisories, general public transportation, toll and parking information, incident information, roadway maintenance and construction information, air quality and/or weather information, and broadcasts the information to travelers using technologies such as FM subcarrier, satellite radio, cellular data broadcasts, and Internet web casts. The information may be provided directly to travelers or provided to merchants and other traveler service providers.	INDOT Traffic Management Center	Planned
		User Personal Computing Devices	Existing
Network Surveillance (ATMS01)	Includes traffic detectors, other surveillance equipment, the supporting field equipment, and fixed-point to fixed-point communications to transmit the collected data back to the Traffic Management Subsystem. The data generated by this market package enables traffic managers to monitor traffic and road conditions, identify and verify incidents, detect faults in indicator operations, and collect census data for traffic strategy development and long range planning.	INDOT Personnel	Planned
		INDOT Roadside Equipment	Planned
		INDOT Traffic Management Center	Planned
Traffic Probe Surveillance (ATMS02)	Provides surveillance of the roadway network though: 1) wide-area wireless communications between the vehicle and center for communicating vehicle operational information and status directly to the center, and 2) dedicated short range communications between passing vehicles and the roadside for providing equivalent information to the center. The market package enables transportation operators and traveler information providers to monitor road conditions, identify incidents, analyze and reduce the collected data, and make it available to users and private information providers.	Bloomington Roadside Equipment	Existing
Surface Street Control (ATMS03)	Provides the central control and monitoring equipment, communication links, and the signal control equipment that support local surface street control and/or arterial traffic management. This market package is generally an intra-jurisdictional package that does not rely on real-time communications between separate control systems to achieve area-wide traffic signal coordination. Systems that achieve coordination across jurisdictions by using a common time base or other strategies that do not require real time coordination would be represented by this package. This market package is consistent with typical urban traffic signal control systems.	Bloomington Roadside Equipment	Existing
		INDOT Roadside Equipment	Planned
		Monroe County Roadside Equipement	Planned

Table 5: Market Packages (continued)

Market Package	Market Package Description	Element	Status
Freeway Control (ATMS04)	Provides central monitoring and control, communications, and field equipment that support freeway management. It supports a range of freeway management control strategies including ramp metering, interchange metering, mainline lane controls, mainline metering, and other strategies including variable speed controls.	INDOT Roadside Equipment	Planned
		INDOT Traffic Management Center	Planned
Traffic Information Dissemination (ATMS06)	Provides driver information using roadway equipment such as dynamic message signs or highway advisory radio. A wide range of information can be disseminated including traffic and road conditions, closure and detour information, incident information, and emergency alerts and driver advisories. This package provides information to drivers at specific equipped locations on the road network. This package also covers the equipment and interfaces that provide traffic information from a traffic management center to the media, Transit Management, Emergency Management, and Information Service Providers.	INDOT Personnel	Planned
		INDOT Traffic Management Center	Planned
Regional Traffic Management (ATMS07)	Provides for the sharing of traffic information and control among traffic management centers to support regional traffic management strategies such as coordinated signal control in a metropolitan area and coordination between freeway operations and arterial signal control within a corridor. The nature of optimization and extent of information and control sharing is determined through working arrangements between jurisdictions. Several levels of coordination are supported from sharing of information through sharing of control between traffic management centers.	INDOT Personnel	Planned
		INDOT Traffic Management Center	Planned
Traffic Incident Management System (ATMS08)	Manages both unexpected incidents and planned events so that the impact to the transportation network and traveler safety is minimized. The market package includes incident detection capabilities through roadside surveillance devices and through regional coordination with other traffic management, maintenance and construction management and emergency management centers as well as rail operations and event promoters. Information from these diverse sources is collected and correlated by this market package to detect and verify incidents and implement an appropriate response. This market package supports traffic operations personnel in developing an appropriate response in coordination with emergency management, maintenance and construction management, and other incident response personnel to confirmed incidents.	Emergency Dispatch Center	Existing
		Emergency Personnel	Existing
		Emergency Vehicles	Existing
		INDOT Personnel	Existing
		INDOT Roadside Equipment	Existing
		INDOT Traffic Management Center	Planned
Standard Railroad Grade Crossing (ATMS13)	Manages highway traffic at highway-rail intersections where operational requirements do not dictate more advanced features. Both passive and active warning systems (e.g., flashing lights and gates) are supported. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification by interfaced wayside equipment of an approaching train.	Monroe County Roadside Equipement	Existing

Table 5: Market Packages (continued)

Market Package	Market Package Description	Element	Status
Emergency Call-Taking and Dispatch (EM01)	Provides basic public safety call-taking and dispatch services. It includes emergency vehicle equipment, equipment used to receive and route emergency calls, and wireless communications that enable safe and rapid deployment of appropriate resources to an emergency. Coordination between Emergency Management Subsystems supports emergency notification between agencies.	Emergency Dispatch Center	Existing
		Emergency Personnel	Existing
		Emergency Vehicles	Existing
Emergency Routing (EM02)	Supports automated vehicle location and dynamic routing of emergency vehicles. Traffic information, road conditions, and suggested routing information are provided to enhance emergency vehicle routing. Special priority or other specific emergency traffic control strategies can be coordinated to improve the safety and time-efficiency of responding vehicle travel on the selected route(s).	Bloomington Roadside Equipment	Existing
		Emergency Dispatch Center	Existing
		Emergency Personnel	Existing
		Emergency Vehicles	Existing
Disaster Response and Recovery (EM08)	Enhances the ability of the surface transportation system to respond to and recover from natural and man-made/technological disasters. The market package supports coordination of emergency response plans, including general plans developed before a disaster as well as specific tactical plans with short time horizon that are developed as part of a disaster response. This market package supports transition back to normal transportation system operation, recovering resources, managing on-going transportation facility repair, supporting data collection and revised plan coordination, and other recovery activities.	Emergency Dispatch Center	Existing
		Emergency Personnel	Existing
Evacuation and Reentry Management (EM09)	Supports evacuation of the general public from a disaster area and manages subsequent reentry to the disaster area. This market package supports coordination of evacuation plans among the federal, state, and local transportation, emergency, and law enforcement agencies that may be involved in a large-scale evacuation. Information is shared with traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Emergency Dispatch Center	Existing
		Emergency Personnel	Existing
		Transit Operations	Existing
		Transit Personnel	Existing
Maintenance and Construction Vehicle Maintenance (MC02)	Performs vehicle maintenance scheduling and manages both routine and corrective maintenance activities on vehicles and other maintenance and construction equipment. It includes on-board sensors capable of automatically performing diagnostics for maintenance and construction vehicles, and the systems that collect this diagnostic information and use it to schedule and manage vehicle maintenance.	Bloomington Maintenance and Construction	Existing
		Bloomington Vehicles	Existing
		INDOT Operations and Constrution	Existing
		INDOT Vehicles	Existing
		Monroe County Maintenance and Construction	Existing
		Monroe County Vehicles	Existing

Table 5: Market Packages (continued)

Market Package	Market Package Description	Element	Status
Road Weather Data Collections (MC03)	Collects current road and weather conditions using data collected from environmental sensors deployed on the roadway or from Maintenance and Construction Vehicles. The collected environmental data is used by the Weather Information Processing and Distribution Market Package to process the information and make decisions on operations. The market package may also request and receive qualified data sets from meteorological systems.	Bloomington Maintenance and Construction	Existing
		Bloomington Roadside Equipment	Existing
Winter Maintenance (MC06)	Supports winter road maintenance including snow plow operations, roadway treatments (e.g., salt spraying and other anti-icing material applications), and other snow and ice control activities. This package monitors environmental conditions and weather forecasts and uses the information to schedule winter maintenance activities, determine the appropriate snow and ice control response, and track and manage response operations.	Bloomington Maintenance and Construction	Existing
		Bloomington Vehicles	Existing
		INDOT Operations and Constrution	Existing
		INDOT Vehicles	Existing
		Monroe County Maintenance and Construction	Existing
		Monroe County Vehicles	Existing
		Weather Services	Existing
Roadway Maintenance and Construction (MC07)	Supports numerous services for scheduled and unscheduled maintenance and construction on a roadway system or right-of-way. Maintenance services would include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, CCTV, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling maintenance and construction activities.	Bloomington Maintenance and Construction	Existing
		Bloomington Vehicles	Existing
		Ellettsville Maintenance and Construction	Existing
		INDOT Operations and Constrution	Existing
		INDOT Vehicles	Existing
		Monroe County Maintenance and Construction	Existing
		Monroe County Vehicles	Existing
Work Zone Management (MC08)	Manages work zones, controlling traffic in areas of the roadway where maintenance, construction, and utility work activities are underway. Work zone information is coordinated with other groups. Work zone speeds and delays are provided to the motorist prior to the work zones. This market package provides control of field equipment in all maintenance and construction areas, including fixed, portable, and truck-mounted devices supporting both stationary and mobile work zones.	INDOT Operations and Constrution	Planned
		INDOT Roadside Equipment	Planned
		INDOT Traffic Management Center	Planned
		Media	Planned

Table 5: Market Packages (continued)

Market Package	Market Package Description	Element	Status
Maintenance and Construction Activity Coordination (MC10)	Supports the dissemination of maintenance and construction activity to centers that can utilize it as part of their operations, or to the Information Service Providers who can provide the information to travelers.	Bloomington Maintenance and Construction	Existing
		Ellettsville Maintenance and Construction	Existing
		INDOT Operations and Constrution	Existing
		Media	Existing
		Monroe County Maintenance and Construction	Existing

VIII. Interconnections and Information Flows

Regional Architecture Interconnections

The regional architecture has a total of 41 interconnections between the 25 elements that comprise it. Interconnect Diagram 1 illustrates the regional architecture interconnections. The interconnections are broken down as follows:

Bloomington Maintenance and Construction – 9 total interconnections with:
Bloomington Roadside Equipment, Bloomington Vehicles, Emergency Dispatch Center, INDOT Operations and Construction, INDOT Traffic Management Center, Media, Monroe County Maintenance and Construction, Transit Operations, and Weather Services

Ellettsville Maintenance and Construction – 5 total interconnections with:
INDOT Operations and Construction, Media, Monroe County Maintenance and Construction, Transit Operations, and Weather Services

Emergency Dispatch Center – 4 total interconnections with:
Emergency Personnel, Emergency Vehicles, Media, and Security Monitoring Field Equipment

INDOT Operations and Construction – 6 total interconnections with:
INDOT Roadside Equipment, INDOT Traffic Management Center, INDOT Vehicles, Media, Monroe County Maintenance and Construction, and Weather Services

INDOT Personnel – 1 interconnection with:
INDOT Traffic Management Center

INDOT Roadside Equipment – 2 total interconnections with:
INDOT Traffic Management Center, and INDOT vehicles

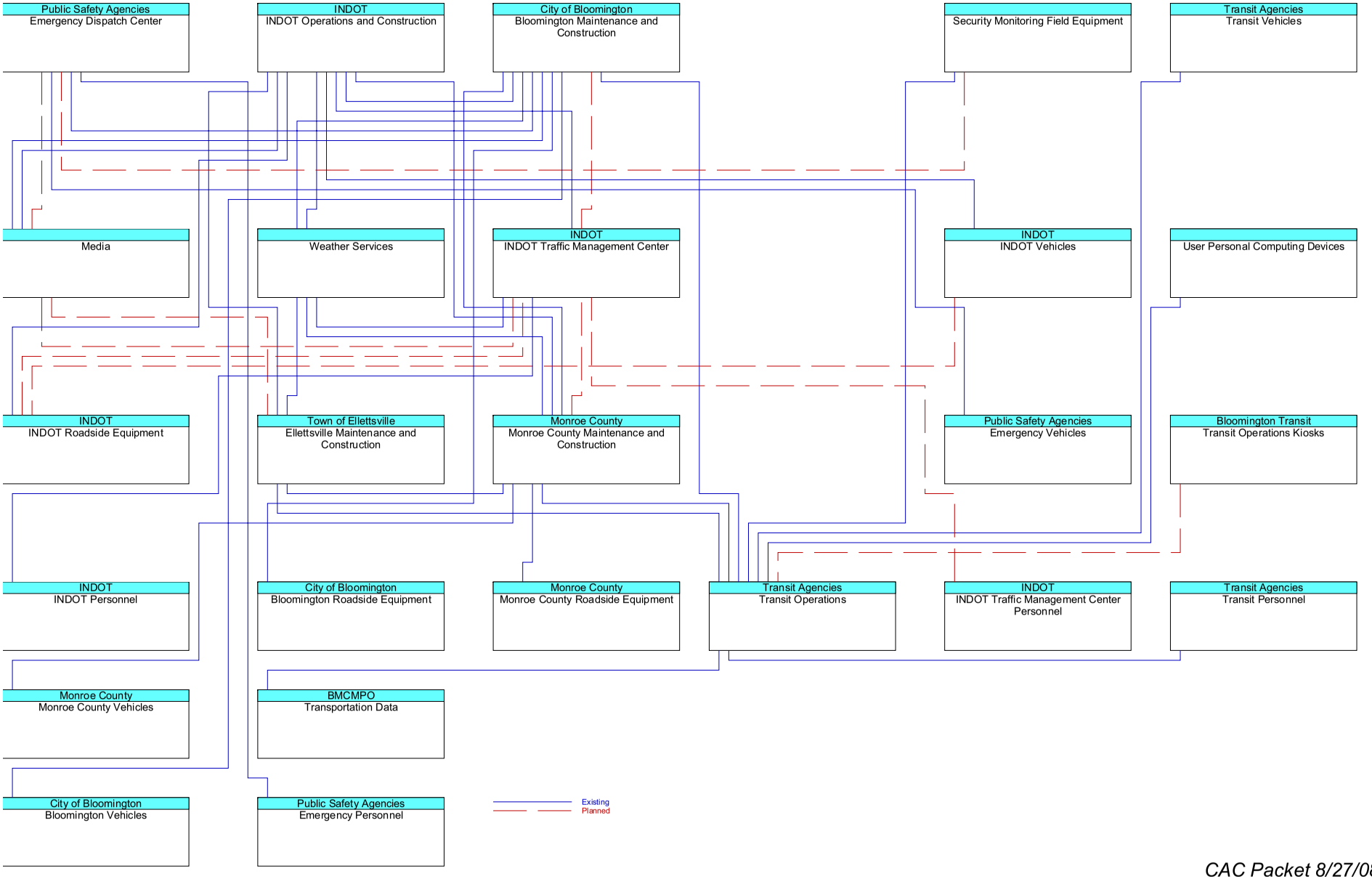
INDOT Traffic Management Center – 4 total interconnections with:
INDOT Traffic Management Center Personnel, Media, Monroe County Maintenance and Construction, and Weather Services

Monroe County Maintenance and Construction – 4 total interconnections with:
Monroe County Roadside Equipment, Monroe County Vehicles, Transit Operations, and Weather Services

Security Monitoring Field Equipment – 1 interconnection with:
Transit Operations

Transit Operations – 5 total interconnections with:
Transit Operations Kiosks, Transit Personnel, Transit Vehicles, Transportation Data, and User Personal Computing Devices

Diagram 1: Regional Architecture Interconnections



Regional Architecture Information Flows

The regional architecture has a total of 117 information flows between the 25 elements that comprise it. The information flows entering and exiting each of the major systems are illustrated below followed by the information flow for the entire regional architecture.

Diagram 2: Bloomington Maintenance and Construction Information Flow Diagram

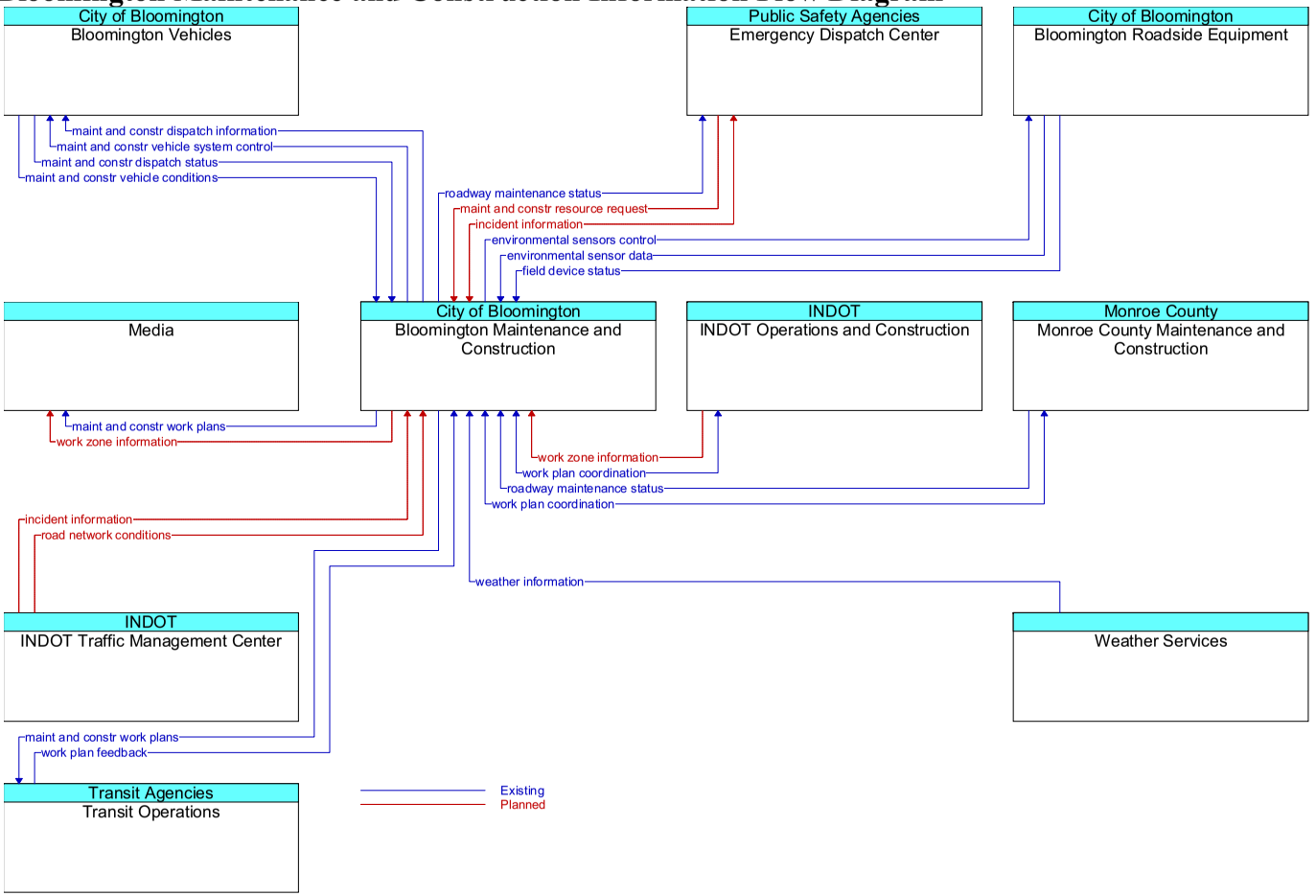


Diagram 3: Ellettsville Maintenance and Construction Flow Diagram

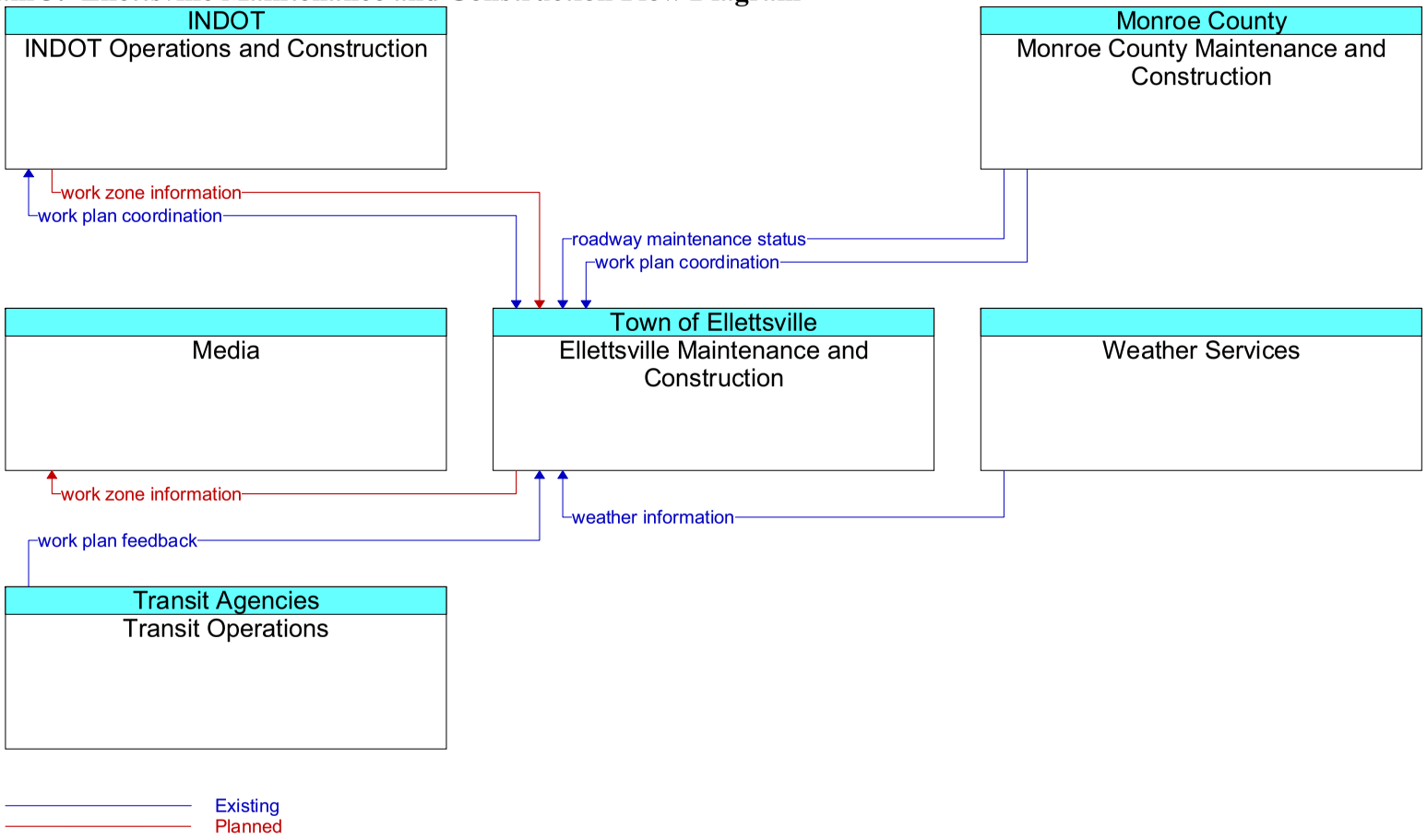


Diagram 4: Emergency Dispatch Center Flow Diagram

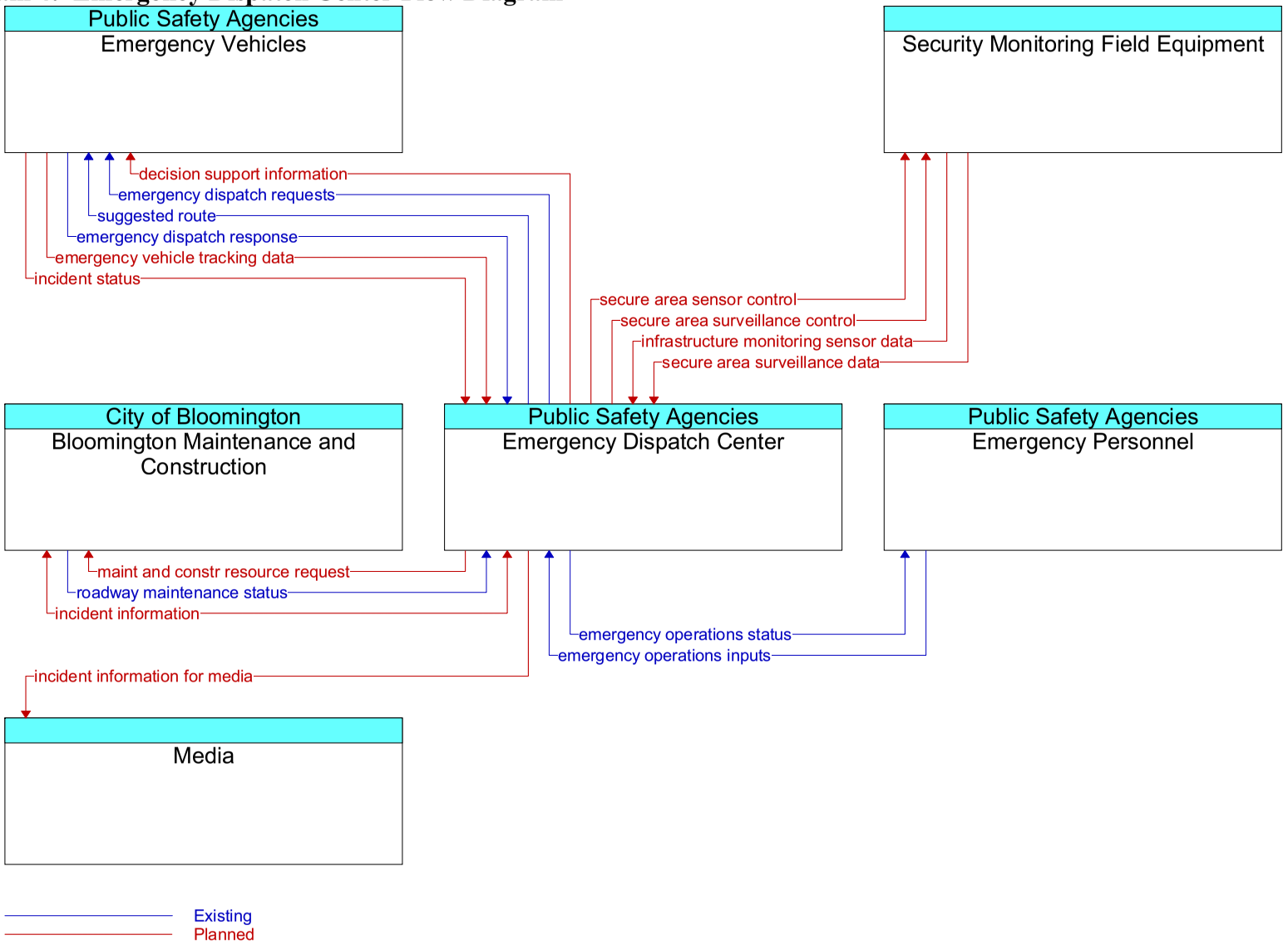


Diagram 5: INDOT Operations and Construction Flow Diagram

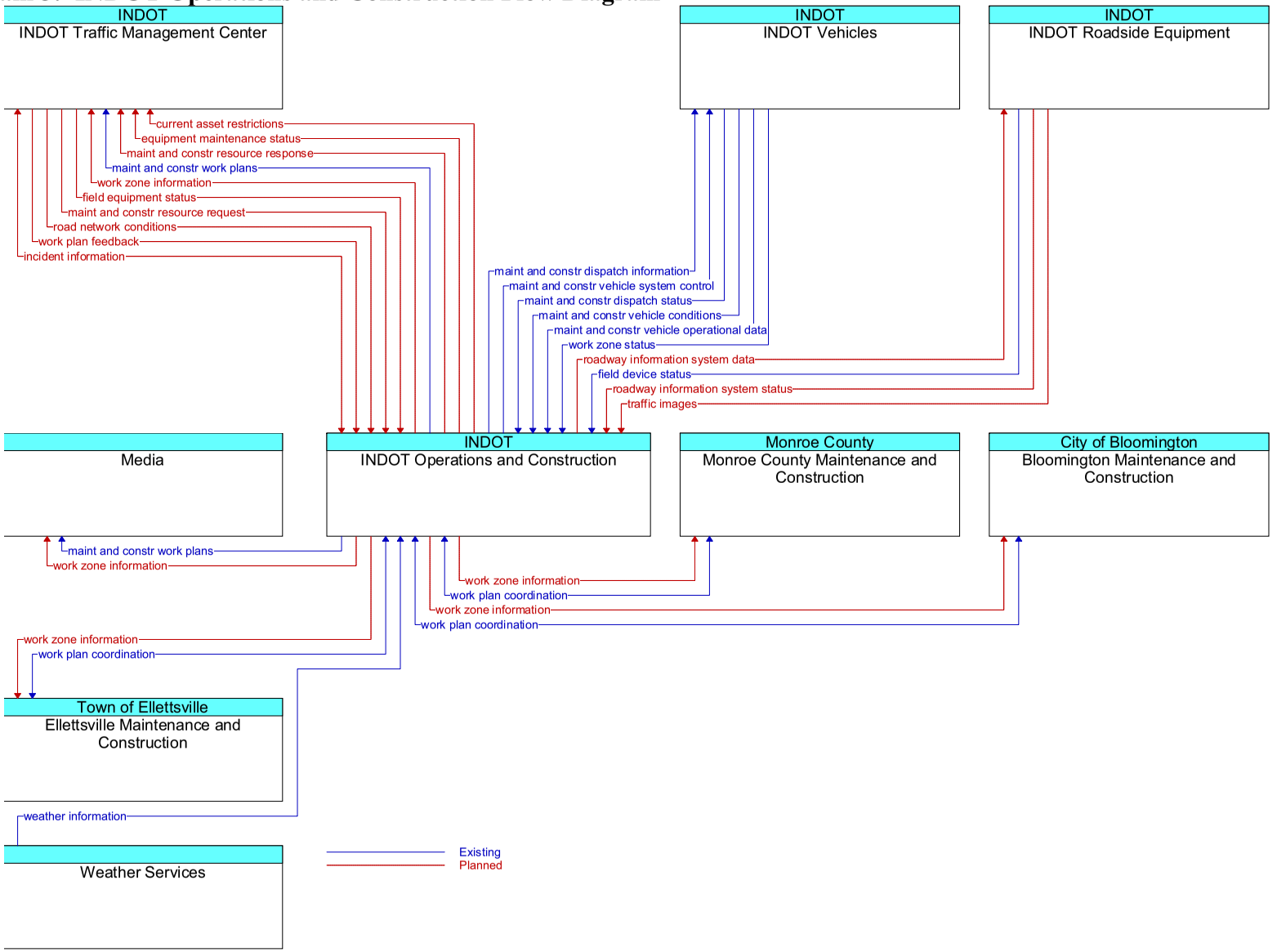


Diagram 6: INDOT Traffic Management Center Flow Diagram

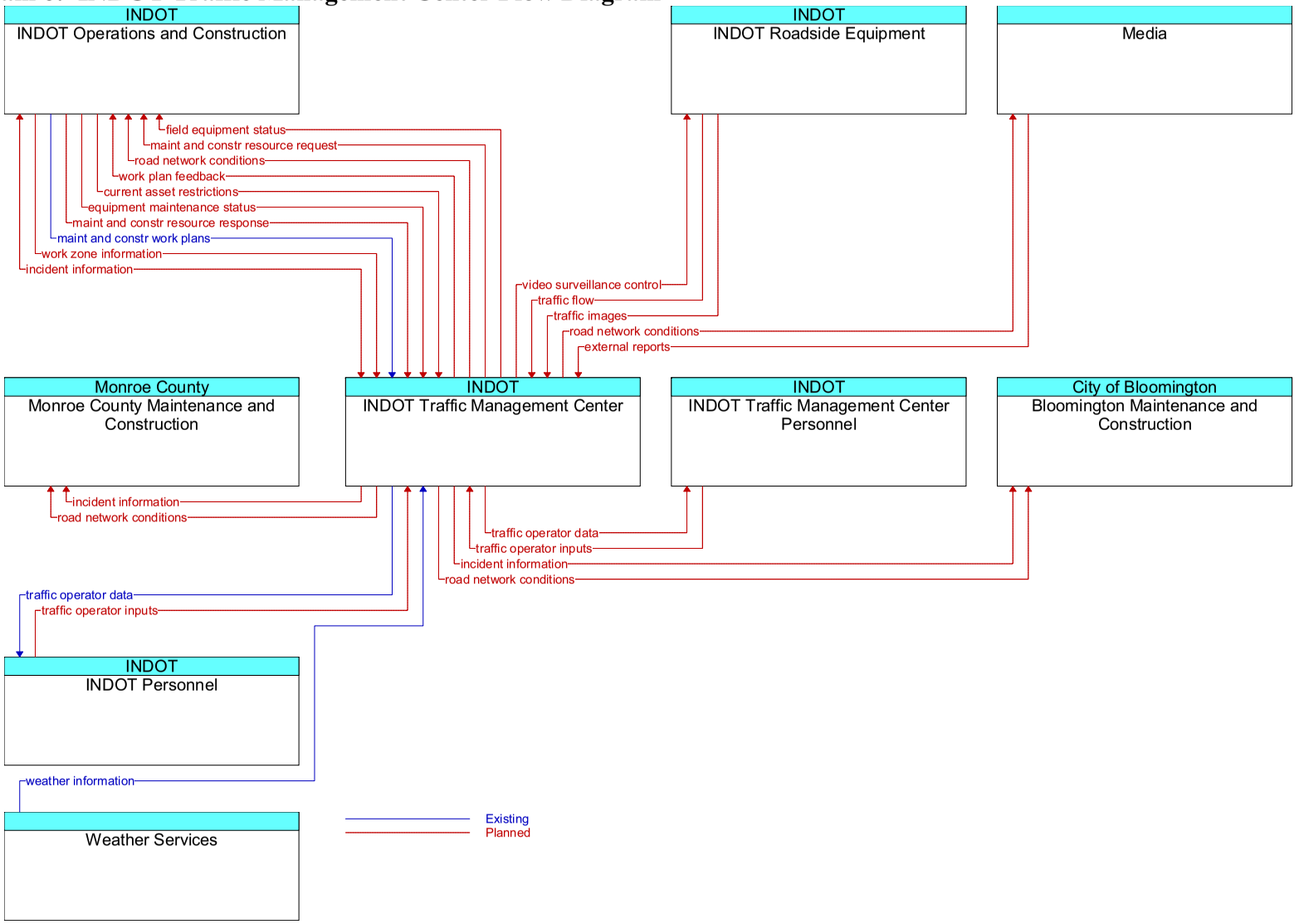


Diagram 7: Monroe County Maintenance and Construction Flow Diagram

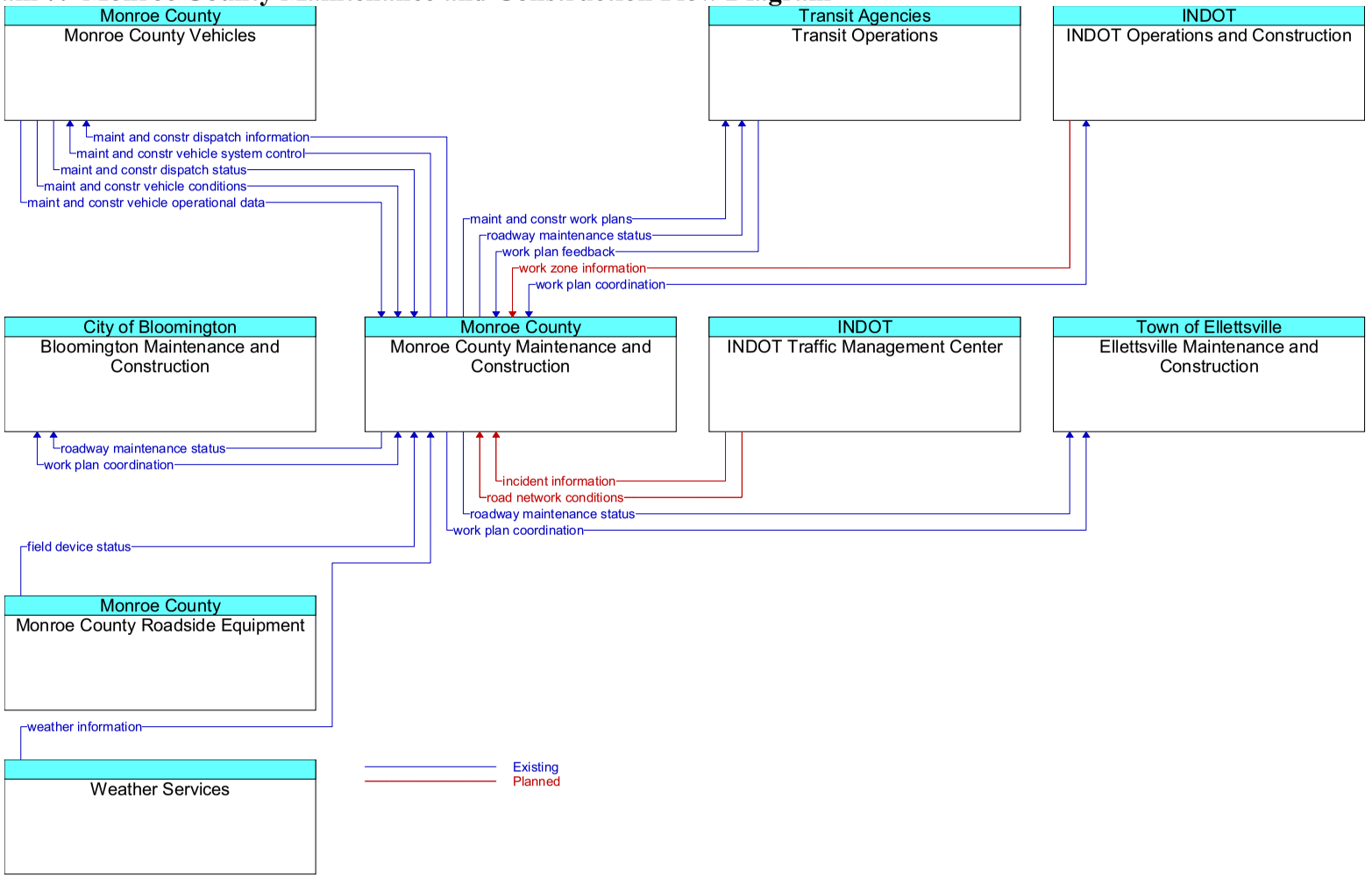


Diagram 8: Transit Operations Flow Diagram

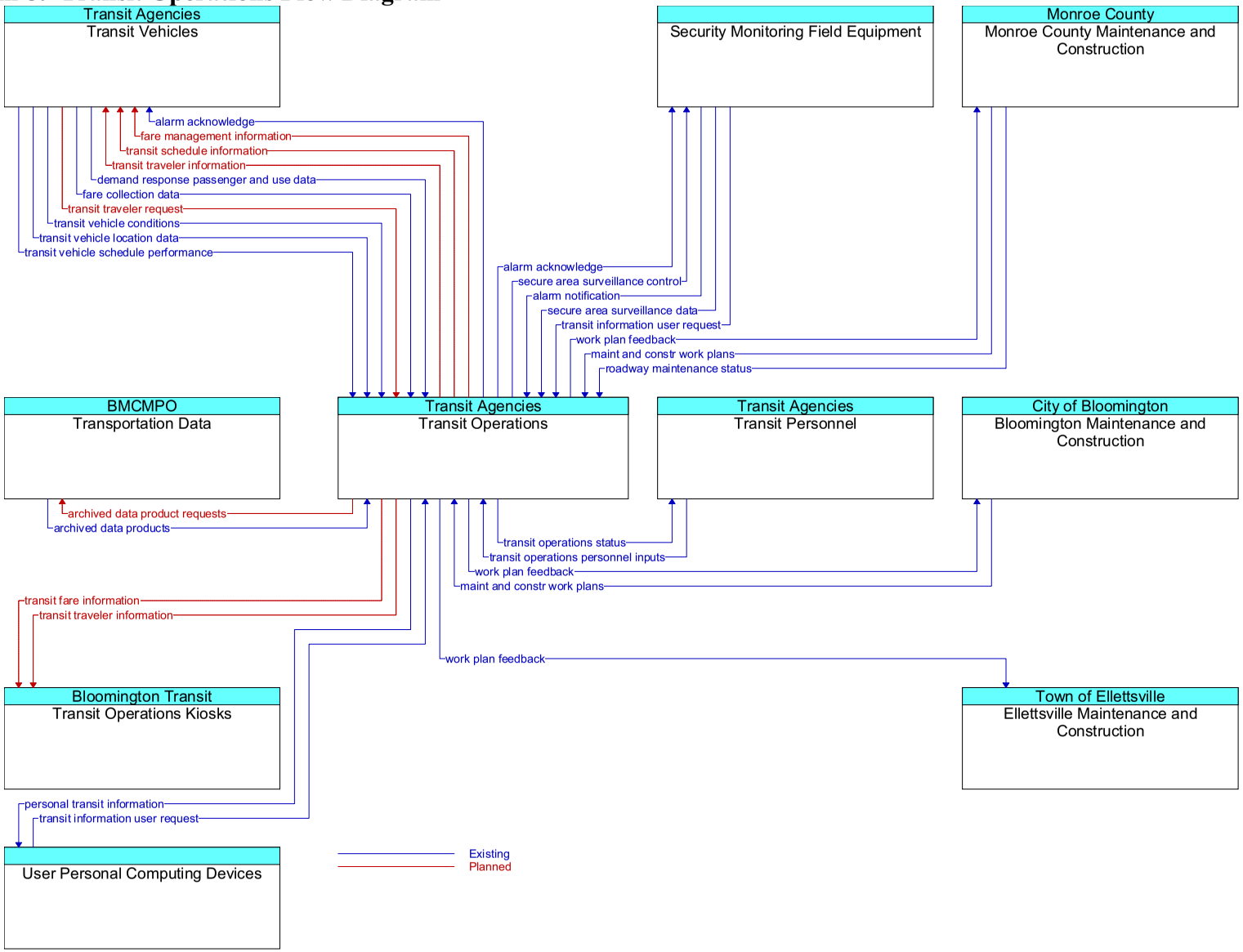
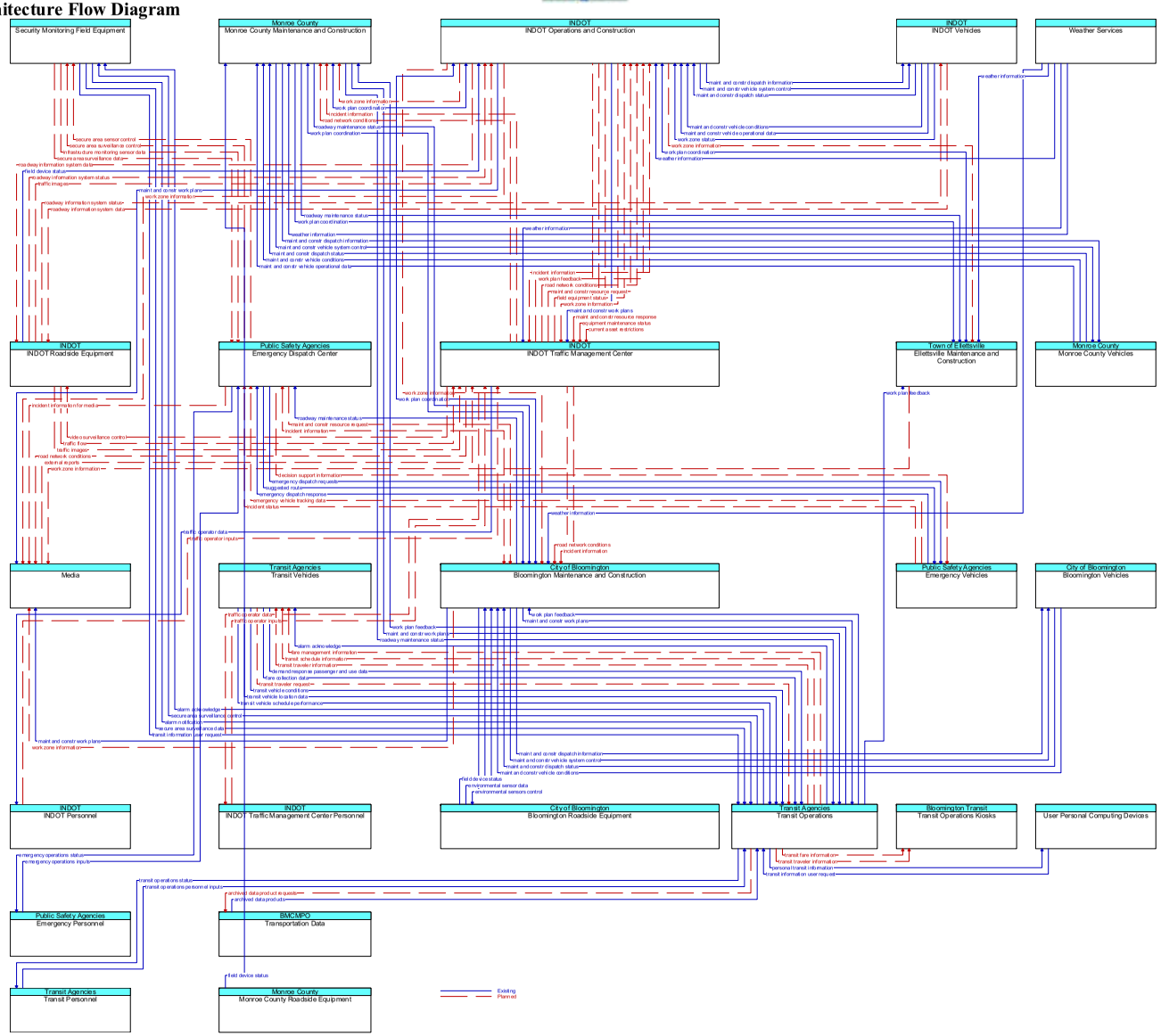


Diagram 9: Regional ITS Architecture Flow Diagram



IX. Functional Requirements

The functional requirements describe the tasks or activities that are performed by each system in the region. This documents the share of work that each system in the region will do to provide services. The following lists identify the functional requirements of each of the major systems in the ITS Architecture.

Bloomington Maintenance and Construction Functional Requirements (City of Bloomington):

- Provide weather and road condition information to personnel;
- Collect operational status for the roadside environmental sensor equipment;
- Provide dispatch information to maintenance and construction vehicles based on the outputs of the decision support system, including recommended roadway treatment actions;
- Maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets;
- Respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance, including winter maintenance;
- Exchange information with administrative systems to support the planning and scheduling of maintenance and construction activities;
- Provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities;
- Collect current and forecast traffic and weather information;
- Schedule preventive and corrective vehicle maintenance with the repair facility based on fleet health reports, maintenance records, vehicle utilization, and vehicle availability;
- Exchange information with administrative systems to support the planning and scheduling of winter maintenance activities;
- Provide status information about scheduled winter maintenance activities including anticipated closures, and impact to the roadway, alternate routes, anticipated delays, closure times, and durations;
- Dispatch and route winter maintenance vehicle drivers and support them with route specific environmental, incident, advisory, threat, alert, traffic information;
- Determine the need for roadway treatment based on current and forecasted weather information, current usage of treatments and materials, available resources, requests from other agencies, and recommendations from the maintenance decision support system under winter conditions;
- Provide dispatch instructions for vehicle operators based on input parameters from center personnel under winter conditions;
- Assess the status of winter maintenance activities;
- Provide status information about scheduled maintenance and construction activities;

Ellettsville Maintenance and Construction (Town of Ellettsville)

- Provide dispatch information to maintenance and construction vehicles based on the outputs of the decision support system, including recommended roadway treatment actions

- Maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets ;
- Respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance;
- Exchange information with administrative systems to support the planning and scheduling of maintenance and construction activities.
- Provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities;
- Collect current and forecast traffic and weather information ;
- Exchange information with administrative systems to support the planning and scheduling of maintenance and construction activities.

Emergency Dispatch Center (Public Safety Agencies)

- Support the interface to the Emergency Telecommunications System (911) to receive emergency notification information and provide it to the emergency system operator;
- Receive emergency call information from 911 services and present the possible incident information to the emergency system operator;
- Receive emergency notification information from other public safety agencies and present the possible incident information to the emergency system operator;
- Dispatch emergency vehicles to respond to verified emergencies under center personnel control;
- Relay location and incident details to responding vehicles;
- Store and maintain the emergency service responses in an action log;
- Manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry;
- Develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster;
- Request resources from transit agencies as needed to support the evacuation;
- Monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies;
- Monitor the progress of the reentry process;
- Manage coordinated inter-agency responses to and recovery from large-scale emergencies;
- Develop, coordinate with other agencies, and store emergency response plans.

INDOT Operations and Construction (INDOT)

- Provide the center personnel with tailored external information, including weather or road condition observations, forecasted weather information or road conditions, current usage of treatments and materials, available resources, equipment and vehicle availability, road network information, and source reliability information;
- Provide dispatch information to maintenance and construction vehicles based on the outputs of the decision support system, including recommended roadway treatment actions;

- Respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance, including winter roadway maintenance;
- Exchange information with administrative systems to support the planning and scheduling of maintenance activities, including winter maintenance;
- Receive equipment availability and materials storage status information from storage facilities to support the scheduling of winter maintenance activities;
- Provide work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact on the roadway, expected times and duration of impact, anticipated delays, alternate routes, and suggested speed limits;
- Control traffic in work zones by providing remote control of dynamic message signs and highway advisory radio systems located in or near the work zone.

INDOT Traffic Management Center (INDOT)

- Monitor, analyze, and store traffic sensor data collected from the field elements under remote control of the center;
- Monitor, analyze, and distribute traffic images from CCTV systems under remote control of the center;
- Distribute road network conditions data based on collected and analyzed traffic sensor and surveillance data to other centers;
- Maintain a database of surveillance and sensors and the freeways, surface street and rural roadways where they are located, to which parts of the network their data applies, the type of data, and the ownership of each link in the network;
- Receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System;
- Collect and store traffic flow and image data from the field equipment to detect and verify incidents;
- Exchange incident and threat information with emergency management centers as well as maintenance and constructions centers;
- Provide video and traffic sensor control commands to the field equipment to detect and verify incidents;
- Exchange alert information and status with emergency management centers;
- Remotely control dynamic messages signs for dissemination of traffic and other information to drivers;
- Remotely control driver information systems that communicate directly from a center to the vehicle for the dissemination of traffic and other information to drivers;
- Collect operational status for the driver information systems equipment;
- Remotely control driver information systems to advise drivers of activity around work zones.

Monroe County Maintenance and Construction (Monroe County)

- Provide the center personnel with tailored external information, including weather or road condition observations, forecasted weather information or road conditions, current usage

of treatments and materials, available resources, equipment and vehicle availability, road network information, and source reliability information;
- Maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets ;
- Respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance (including winter maintenance);
- Exchange information with administrative systems to support the planning and scheduling of maintenance and construction activities;
- Provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities;
- Receive equipment availability and materials storage status information from storage facilities to support the scheduling of roadway maintenance and construction activities;
- Collect current and forecast traffic and weather information from traffic management centers and weather service providers;
- Exchange information with administrative systems to support the planning and scheduling of winter maintenance activities;
- Provide status information about scheduled winter maintenance activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations;
- Receive equipment availability and materials storage status information from storage facilities to support the scheduling of winter maintenance activities;
- Determine the need for roadway treatment based on current and forecasted weather information, current usage of treatments and materials, available resources, requests for action from other agencies, and recommendations from the Maintenance Decision Support system under winter conditions;
- Provide work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected times and duration of impact, anticipated delays, alternate routes, and suggested speed limits;
- Provide status information about scheduled maintenance and construction activities including anticipated closures and the impact to the roadway, alternate routes, anticipated delays, closure times, and durations.

Transit Operations (Transit Agencies)
- Process requests for transit fares to be paid in advance;
- Generate transit routes and schedules based on such factors as parameters input by the system operator, road network conditions, operational data on current routes and schedules, and digitized map data;
- Dispatch fixed route or flexible route transit vehicles;
- Collect transit operational data for use in the generation of routes and schedules;
- Provide transit information to the media including details of deviations from schedule of regular transit services;
- Process trip requests for demand responsive transit services (paratransit);
- Monitor the operational status of the demand response vehicles including status of passenger pick-up and drop-off;

- Dispatch demand response transit vehicles;
- Monitor the locations of transit vehicles within its network;
- Manage the use of transit resources to support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency;
- Coordinate regional evacuation plans with emergency management – identifying the transit role in an evacuation and the transit resources that would be used;
- Generate transit vehicle maintenance schedules that identify the maintenance or repair to be performed and when the work is done;
- Generate transit vehicle availability listings, current and forecast, to support transit vehicle assignment planning based, in part, on the transit vehicle maintenance schedule;
- Generate transit vehicle availability listings, current and forecast, to support transit vehicle assignment planning;
- Assign transit vehicle operators to transit schedules based on their eligibility, route preferences, seniority, and transit vehicle availability.

X. Standards

Standards are documented technical specifications sponsored by a Standards Development Organizations (SDO) to be used consistently as rules, guidelines, or definitions of characteristics for the interchanged data. The standards specifically define the interfaces identified in the National ITS Architecture. The following tables identify the standard name, the SDO, and the associated source element, destination element, and information flows.

American Public Transportation Association (APTA) Transit Communications Interface Protocol (TCIP) [APTA TCIP-S-001 3.0.0]

SDO: APTA

Source Entity	Flow Name	Destination Entity
Personal Information Access	Transit Information User Request	Transit Management
Transit Management	Fare Management Information	Transit Vehicle Subsystem
	Personal Transit Information	Personal Information Access
	Transit Fare Information	Remote Traveler Support
	Transit Traverler Information	Remote Traveler Support
Transit Vehicle Subsystem	Fare Collection Data	Transit Management
	Transit Vehicle Location Data	Transit Management
	Transit Vehicle Schedule Performance	Transit Management

American Society for Testing and Materials (ASTM) [ASTM E2468-05]

SDO: ASTM

Source Entity	Flow Name	Destination Entity
Archived Data Management Subsystem	Archived Data Products	Transit Management

Advanced Traveler Information Systems General Use Standards Group [ATIS General Use]

SDO: Society of Automotive Engineers (SAE)

Source Entity	Flow Name	Destination Entity
Personal Information Access	Transit Information User Request	Transit Management
Transit Management	Personal Transit Information	Personal Information Access
	Transit Fare Information	Remote Traveler Support
	Transit Traveler Information	Remote Traveler Support

Incident Management Standards Group [IEEE IM]

SDO: Institute of Electrical and Electronics Engineers (IEEE)

Source Entity	Flow Name	Destination Entity
Emergency Management	Incident Information	Maintenance and Construction Management
	Incident Information for Media	Media
	Maintenance and Construction Request	Maintenance and Construction Management
Maintenance and Construction Management	Incident Information	Emergency Management
	Incident Information	Traffic Management

Institute of Transportation Engineers (ITE) Traffic Management Data Dictionary (TMDD) [ITE TMDD 2.1]

SDO: American Association of State Highway and Transportation Officails (AASHTO), Institute of Transportation Engineers (ITE)

Source Entity	Flow Name	Destination Entity
Maintenance and Construction Management	Incident Information	Traffic Management
Media	External reports	Traffic Management
Traffic Management	Field Equipment Status	Maintenance and Construction Management
	Incident Information	Maintenance and Construction Management
	Road Network Conditions	Maintenance and Construction Management
	Road Network Conditions	Media

National Transportation Communications for ITS Protocal (NTCIP) Global Object Definitions [NTCIP 1201]

SDO: AASHTO, ITE, National Electrical Manufacturers Associations (NEMA)

Source Entity	Flow Name	Destination Entity
Emergency Management	Secure Area Surveillance Control	Security Monitoring Subsystem
Maintenance and Construction Management	Environmental Sensors Control	Roadway Subsystem
	Roadway Information System Data	Roadway Subsystem
Roadway Subsystem	Environmental Sensors Control	Maintenance and Construction Management
	Field Device Status	Maintenance and Construction Management
	Roadway Information System Status	Maintenance and Construction Management
	Traffic Flow	Traffic Management
	Traffic Images	Maintenance and Construction Management
	Traffic Images	Traffic Management
Security Monitoring Subsystem	Secure Area Surveillance Data	Emergency Management
Traffic Management	Video Surveillance Control	Roadway Subsystem

NTCIP Object Definitions for Dynamic Message Signs [NTCIP 1203]

SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Maintenance and Construction Managemetn	Roadway Information System Data	Roadway Subsystem

NTCIP Object Definitions for Environmental Sensor Stations and Roadside Weather Information System [NTCIP 1204]

SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Roadway Subsystem	Roadway Information System Status	Roadway Subsystem
Maintenance and Construction Managemetn	Environmental Sensors Control	Roadway Subsystem

NTCIP Object Definitions for Closed Circuit Television Camera Control Standard Activity [NTCIP 1205]

SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Roadway Subsystem	Traffic Images	Maintenance and Construction Management
	Traffic Images	Traffic Management
Security Monitoring Subsystem	Secure Area Surveillance Data	Emergency Management
Traffic Management	Video Surveillance Control	Roadway Subsystem
Emergency Management	Secure Area Surveillance Control	Security Monitoring Subsystem

NTCIP Object Definitions for Closed Circuit Television Switching Standard Activity [NTCIP 1208]

SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Emergency Management	Secure Area Surveillance Control	Security Monitoring Subsystem
Roadway Subsystem	Traffic Images	Maintenance and Construction Management
	Traffic Images	Traffic Management
Security Monitoring Subsystem	Secure Area Surveillance Data	Emergency Management
Traffic Management	Video Surveillance Control	Roadway Subsystem

NTCIP Transportation System Sensor Objects [NTCIP 1209]

SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Roadway Subsystem	Traffic Flow	Traffic Management

NTCIP Center to Field Standard Group (NTCIP C2F)

SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Emergency Management	Secure Area Sensor Control	Security Monitoring Subsystem
	Secure Area Surveillance Control	Security Monitoring Subsystem
Maintenance and Construction Management	Environmental Sensors Control	Roadway Subsystem
	Roadway Information System Data	Roadway Subsystem
Roadway Subsystem	Environmental Sesor Data	Maintenance and Construction Management
	Field Device Status	Maintenance and Construction Management
	Roadway Information System Status	Maintenance and Construction Management
	Traffic Flow	Traffic Management
	Traffic Images	Maintenance and Construction Management
	Traffic Images	Traffic Management
Security Monitoring Subsystem	Infrastructure Monitoring Sensor Data	Emergency Management
	Secure Area Surveillance Data	Emergency Management
Traffic Management	Video Surveillance Control	Roadway Subsystem

National Transportation Communications for ITS Protocal (NTCIP) Center to Center Standards Group (NTCIP C2C)
SDO: AASHTO, ITE, NEMA

Source Entity	Flow Name	Destination Entity
Archived Data Management Subsystem	Archived Data Products	Transit Management
Emergency Management	Incident Information	Maintenance and Construction Management
	Incident Information for media	Media
	Maintenance and Construction Requests	Maintenance and Construction Management
Maintenance and Construction Management	Current Asset Restrictions	Traffic Management
	Equipment Maintenance Status	Traffic Management
	Incident Information	Emergency Management
	Incident Information	Traffic Management
	Maintenance and Construction Response	Traffic Management
	Maintenance and Construction Work Plans	Media
	Maintenance and Construction Work Plans	Traffic Management
	Maintenance and Construction Work Plans	Transit Management
	Roadway Maintenance Status	Emergency Management
	Roadway Maintenance Status	Other Maintenance and Construction Management
	Roadway Maintenance Status	Transit Management
	Work Plan Coordination	Other Maintenance and Construction Management
	Work Zone Information	Media
	Work Zone Information	Other Maintenance and Construction Management
	Work Zone Information	Traffic Management
Media	External Reports	Traffic Management
Other Maintenance and Construction Management	Roadway Maintenance Status	Maintenance and Construction Management
	Work Plan Coordination	Maintenance and Construction Management
	Work Zone Information	Maintenance and Construction Management
Traffic Management	Field Equipment Status	Maintenance and Construction Management
	Incident Information	Maintenance and Construction Management
	Maintenance and Construction Requests	Maintenance and Construction Management
	Road Network Conditions	Maintenance and Construction Management
	Road Network Conditions	Media
	Work Plan Feedback	Maintenance and Construction Management
Transit Management	Work Plan Feedback	Maintenance and Construction Management
Weather Service	Weather Information	Maintenance and Construction Management
	Weather Information	Traffic Management

XI. Regional Projects

It is important to identify the ITS projects in the region that are planned within the next five years. There exists a significant interest among stakeholders to implement ITS projects. Unfortunately, due to the lack of funding to implement ITS projects, it is not anticipated that any new projects will be implemented in the next five years. However, several stakeholders will continue to support existing ITS projects:

Public Transit Agencies

Bloomington Transit will continue to support its automatic vehicle locator (AVL) technology on some of its busses and security surveillance of its fleet maintenance yard/building.

Public Safety Agencies
Monroe County Emergency Management will continue to coordinate public safety agencies though the Comprehensive Emergency Management Plan for Monroe County and all individual public safety agencies are committed to assisting in disaster response and recovery, evacuation, and subsequent reentry. Bloomington's Police and Fire Departments will continue to use traffic signal pre-emption devices mounted in some of their vehicles. Indiana University Police will continue to support text messaging and email emergency notification.

Bloomington Maintenance and Construction
Bloomington Public Works will continue to support groundhog traffic counting units which provide real-time traffic counts and weather information to a central database, automate vehicle maintenance scheduling, use dynamic message signs in work zones, control signalized intersections, and share maintenance and construction information with other organizations.

INDOT Operations and Construction
INDOT will continue to use AVL technology in some of its vehicles, automate vehicle maintenance scheduling, collect road and weather condition data, use dynamic message signs and closed circuit television in work zones, control signalized intersections, and share maintenance and construction information with other organizations.

Monroe County Maintenance and Construction
Monroe County will continue to automate vehicle maintenance scheduling, monitor speeds in work zones, control signalized intersections, and share maintenance and construction information with other organizations.

XII. Agreements

There exists a strong level of coordination and cooperation among the different stakeholders within Bloomington, Ellettsville, and Monroe County. Monroe County Emergency Management supports the network of communication among public safety agencies while the MPO Committees represent the interests of the transportation network. However, the majority of agreements are not formalized but rather mutual understandings that coordination and cooperation are required to provide safe and efficient transportation within the metropolitan planning area. As outlined above and in the regional architecture, many flows currently exist before this formal ITS Architecture was implemented illustrating that the relationship among different stakeholders has long been established.

The only notable agreements that exist are those outlined in the Comprehensive Emergency Management Plan. The Comprehensive Emergency Management Plan provides Monroe County the basis for a systematic approach to the resolution of problems created by the threat or occurrence of significant emergencies or disasters. It identifies the responsibilities, functions, operational tasks and the working relationships within and between the various governmental entities and their various departments and agencies, private support organizations, and private citizens.

XIII. Implementation of the Regional Architecture

The Bloomington Monroe County Metropolitan Planning Organization's Regional ITS Architecture is a significant transportation planning document. It will be used as a key reference in the transportation planning process and the allocation of resources. The architecture will be used to ensure all proposed ITS projects are consistent with the regional ITS architecture and additional integration opportunities are considered, leading to more efficient implementations.

It should be noted that this document is not intended to compel any identified stakeholder to implement an ITS project in any given time. Instead, the Regional ITS Architecture is meant to provide stakeholders an opportunity to implement ITS projects that are consistent with the Architecture when funds and buy-in are garnered.

XIII. Maintenance of the Regional Architecture

The Bloomington Monroe County Metropolitan Planning Organization will assume the responsibility of maintaining the Regional ITS Architecture. Any maintenance and updates that are required to be done to the architecture will be done through coordination and consensus with stakeholders.

It is anticipated that a complete review and update of the regional architecture will be conducted at five year intervals. At such time, stakeholders will be engaged and a new ITS Architecture will be presented to each of the Advisory Committees for review and comment and the Policy Committee for their adoption.

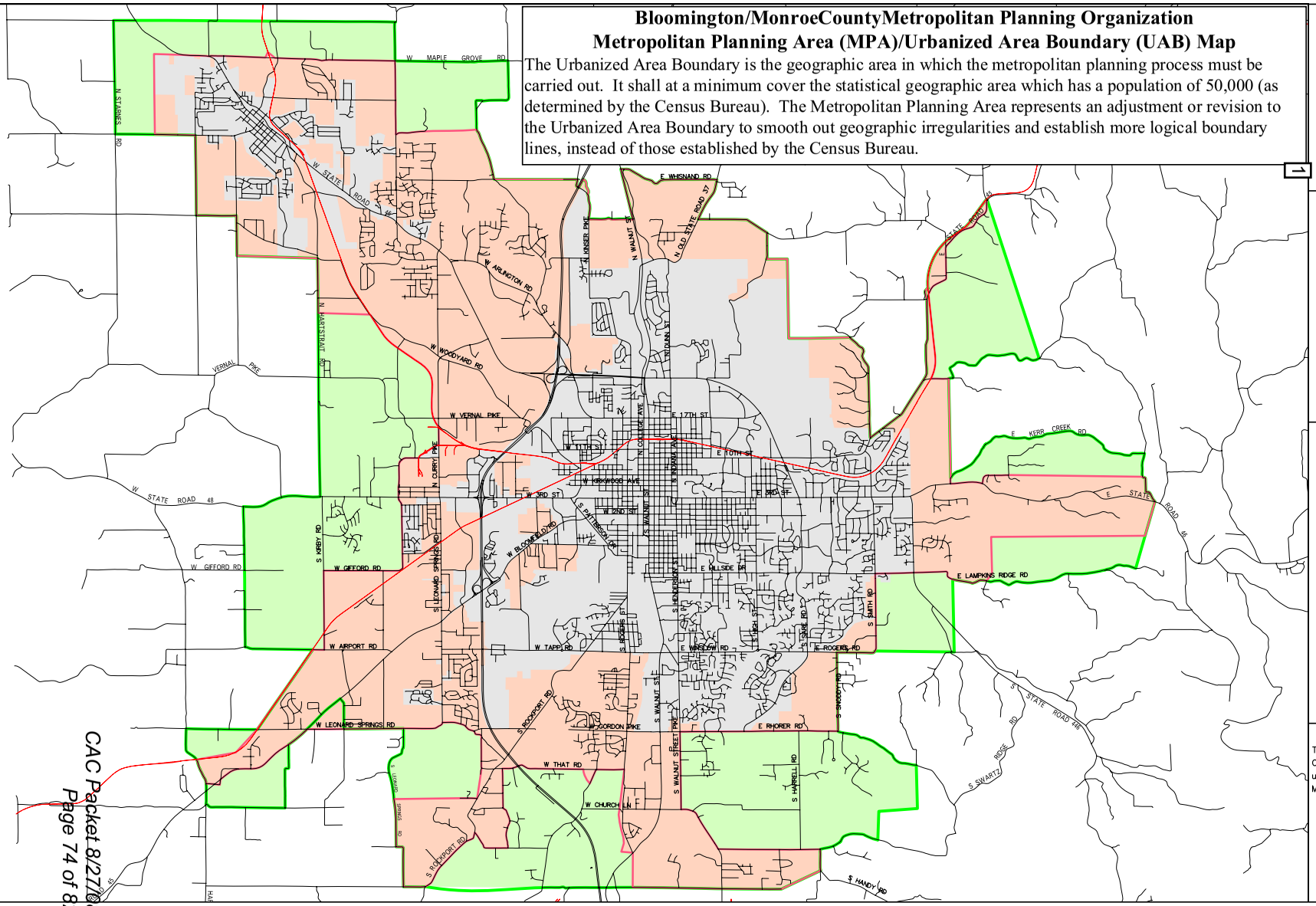
However, modifications to the architecture will need to be made periodically to reflect new opportunities. The various reasons for updates within the five year intervals include, but are not limited to, new projects, project implementation, additional stakeholders, new technology, additional needs in the region, changes to the National ITS architecture, and changes in the planning process.

Since maintenance of the Regional ITS Architecture is ongoing and dynamic, the current Architecture and its complimentary database will be maintained administratively so that changes can be made quickly in response to needs that may arise. Since the Transportation Improvement Program or the Unified Planning Work Program would need to identify an ITS project before its implementation, there is assurance that ITS projects will not get implemented unknowingly.

The most up-to-date version of this document will also be made available on the web (www.bloomington.in.gov/mpo), the City of Bloomington Planning Department, and the Indiana Room of the Monroe County Public Library Main Branch.

Bloomington/MonroeCountyMetropolitan Planning Organization
Metropolitan Planning Area (MPA)/Urbanized Area Boundary (UAB) Map

The Urbanized Area Boundary is the geographic area in which the metropolitan planning process must be carried out. It shall at a minimum cover the statistical geographic area which has a population of 50,000 (as determined by the Census Bureau). The Metropolitan Planning Area represents an adjustment or revision to the Urbanized Area Boundary to smooth out geographic irregularities and establish more logical boundary lines, instead of those established by the Census Bureau.



City of Bloomington

2000 MPA
2000 UAB
Incorporated Areas

Feb 13, 2007

N
W GIS E
S

Scale: 1" = 6000'

0 6000

This map was produced by the City of Bloomington GIS for use as map information only. Map is NOT warranted.

Tmpopa05pB

AGENDA ITEM VII.B.

From: Nsonwu, Emmanuel
To: Hess, Raymond;
CC:
Subject: TIP Amendment: Des# 0400392
Date: Wednesday, July 16, 2008 10:51:35 AM
Attachments:

Raymond:

INDOT is requesting the amendment of your FY 2009 – FY 2012 TIP to include the following project in Monroe County.

Des#: 0400392

Location: SR 45; At Liberty Dr./Hickory Leaf Dr.

Work Category: Central Office Congestion Project (Minor)

Work Type: Intersection Improvement W/Added Turn Lanes

Phase: PE - $5,000.00 (FY 2009) – STP Funds

Thanks.

Emmanuel Nsonwu
Development Specialist
Urban & MPO Planning
Office of Urban & Corridor Planning
PH: 317-232-5485 FAX: 317-232-0958

MEMORANDUM

To: Citizens Advisory Committee

From: Joe Fish,
Transportation Planner

Date: August 14, 2008

Re: Highway Safety Improvement Program (HSIP)

Background

Under SAFETEA-LU, a new funding source for local safety improvement projects was made available to MPOs. This source is known as the Highway Safety Improvement Program (HSIP), and it replaces the former Hazard Elimination & Safety (HES) program. The key difference between the two programs is that while HES was administered by INDOT and projects competed for funding on a statewide basis, HSIP is administered by the MPO and a sub-allocation of funding for projects is given to the MPO for distribution according to its own procedures.

Available Funding

While Indiana MPOs are only recently beginning to establish formal HSIP programs on the local level, HSIP funding was actually allocated to each MPO beginning with Fiscal Year 2006. The allocation available to the Bloomington/Monroe County MPO is as follows:

- FY 2006: ($214,115 Allocated) x (92.45% Spending Authority) = $197, 950
- FY 2007: ($190,800 Allocated) x (90.6357% Spending Authority) = $172,933
- FY 2008: ($190,800 Allocated) x (90.6357% Spending Authority) = $172,933
- FY 2009: ($190,800 Allocated) x (90.6357% Spending Authority) = $172,933

Based on these numbers, the total amount of HSIP funding that could be distributed by the MPO in FY 2009 is approximately $716,749. Keep in mind that the FY 2008 & 2009 funding is purely an estimate, as the sharing agreement and spending authority for those fiscal years has not yet been finalized.

Procedures/Requirements

The HSIP guidelines contained in this packet provide a detailed explanation of the process that will be used by the MPO to distribute HSIP funds. The most important considerations are:

- Proposed projects must be capable of eliminating or reducing fatal and incapacitating injury crashes.
- Projects must be listed in the BMCMPO's top 25 fatal/incapacitating crash locations.
- Projects must demonstrate a cost/benefit ratio greater than one.
- Preference should be given to smaller projects so as to spread the money throughout the region.
- LPAs will be required to evaluate the effectiveness of the project using six years of before/after data (three years before treatment compared to three years after treatment).
- The local match is 10%.

Bloomington/Monroe County Metropolitan Planning Organization
Highway Safety Improvement Program Guidelines

Background

Under SAFETEA-LU, a new funding source for local safety improvement projects was made available to MPOs. This source is known as the Highway Safety Improvement Program (HSIP), and it replaces the former Hazard Elimination & Safety (HES) program. The key difference between the two programs is that while HES was administered by INDOT and projects competed for funding on a statewide basis, HSIP is administered by the MPO and a sub-allocation of funding for projects is given to the MPO for distribution according to its own procedures.

Available Funding

While Indiana MPOs are only recently beginning to establish formal HSIP programs on the local level, HSIP funding was actually allocated to each MPO beginning with Fiscal Year 2006. The allocation available to the Bloomington/Monroe County MPO is as follows:

- FY 2006: ($214,115 Allocated) x (92.45% Spending Authority) = $197, 950
- FY 2007: ($190,800 Allocated) x (90.6357% Spending Authority) = $172,933
- FY 2008: ($190,800 Allocated) x (90.6357% Spending Authority) = $172,933
- FY 2009: ($190,800 Allocated) x (90.6357% Spending Authority) = $172,933

Based on these numbers, the total amount of HSIP funding that could be distributed by the MPO in FY 2009 is approximately $716,749. Keep in mind that the FY 2008 & 2009 funding is purely an estimate, as the sharing agreement and spending authority for those fiscal years has not yet been finalized.

Local Public Agencies will be required to provide a local match in the amount of 10% of the project cost. Projects providing additional local match funds may be given a higher priority over projects not providing any additional local match.

Overview of Procedures/Requirements (from HSIP memo)

The MPO is responsible for administering the local HSIP process, including establishing project selection procedures, soliciting projects from LPAs, evaluating project applications, and awarding funding to projects. INDOT retains the authority to "spot-check" the MPO program to ensure that it remains faithful to State and Federal guidelines, but will not be monitoring it every step of the way.

There are no hard and fast requirements for exactly how the project selection process must work; however, there are a few core elements that our selection process must address:

- DATA DRIVEN: The process of selecting projects must be data driven. Since this is a safety program, it must utilize crash data to illustrate the need for projects, and known crash reduction factors for predicting the success of countermeasures. The primary source of crash data should be the ARIES system, and the primary reference for crash reduction factors should be FHWA's "Desktop Reference for Crash Reduction Factors."[1]
- FATALITY/SERIOUS INJURY CRASHES: The primary goal for HSIP is the reduction of fatality and serious injury ("incapacitating" injury) crashes. Data used to justify a

[1] http://www.transportation.org/sites/safetymanagement/docs/Desktop%20Reference%20Complete.pdf

proposed project must address this factor. Reduction of property damage and minor injury crashes is not a sufficient justification for a project.

- 3 YEARS BEFORE & AFTER: Federal HSIP guidelines require that crash data be evaluated at project locations for the 3 years before project implementation, and for the 3 years after the project is complete. This data will be used to evaluate the success of the selected projects. Once again, the primary source for this data should be the ARIES crash system.
- DOCUMENTED METHODOLOGY: As you would expect, whatever process we decide on for allocating the HSIP funding must be clearly documented. The MPO must be able to demonstrate that a logical, structured decision-making process occurs with respect to allocating the HSIP money.

In keeping with statewide goals, INDOT recommends that the MPO focus on funding smaller-scaled, high-impact projects that are spread throughout the MPO. Proactive strategies (e.g., pavement markings, lighting, curb extensions, sign enhancements, active warning systems, sight distance improvements, rumble strips, guardrails, cable barriers, etc.) are strongly preferred over high-cost reactive strategies (e.g., roadway realignment/reconfiguration, new signals, roundabouts, etc.). High-dollar projects, such as major intersection reconstructions, would rapidly expend the funds and could tie up multiple years of funding. In addition, such projects would likely involve right-of-way acquisition, which would cause a significant lag in project implementation. Smaller scale projects, without ROW issues, can be implemented much more quickly.

To ensure that HSIP funds are used in a cost-effective manner, a benefit/cost ratio greater than one (1) is required. The benefit/cost ratio is based on the relationship of the type and number of crashes to the specific countermeasures proposed. Therefore, the proposed treatment must be capable of reducing the types of crashes associated with the site. Furthermore, benefit/cost analysis may tend to favor proactive measures, since in many cases they can achieve similar crash reductions as more expensive treatments.

In order to facilitate benefit/cost analysis, the MPO will provide a benefit/cost spreadsheet to the LPAs. To complete the worksheet, it will be necessary for the LPAs to consult the police reports for the crashes under consideration. At the request of the LPA, the MPO can provide a list of the crash record numbers for any particular location so that the crash reports can be more easily obtained. Relationships between crash type and countermeasures are detailed in FHWA's "Desktop Reference for Crash Reduction Factors."

HSIP Fund Distribution Process

The process for distributing HSIP funds shall be as follows:

1. BMCMPO identifies eligible project locations based upon ARIES Crash Data from the most recent 3-year period.
2. BMCMPO issues a call for projects.
3. LPAs submit project applications with appropriate supporting materials.
4. BMCMPO staff evaluates project applications and works with LPAs to refine their applications, if necessary.
5. BMCMPO issues public notice soliciting comments related to proposed applications (as required for amendments into the TIP).

6. LPAs present project applications to CAC and TAC for feedback. CAC and TAC make a recommendation as to whether the project should receive HSIP funding.
7. Policy Committee awards HSIP funding.

Eligible Project Locations

In order to be eligible for HSIP funding, proposed project locations must be:

1. within the MPO urbanized area, and
2. exclusive of INDOT facilities, and
3. identified in the list of the top 25 fatal/incapacitating injury crash locations, or the list of the top 25 fatal/incapacitating injury crash segments for the most recent three year period.

LPAs may appeal to the Policy Committee to allow a project location that is not on the list of eligible project locations. If so approved, that project location will be added to the list of eligible project locations.

Call for Projects

The BMCMPO will release a call for projects shortly after the list of eligible project locations is produced. Project applications for locations not identified on the eligible project list (including those added through appeal) will not be considered for HSIP funding.

Project Application Requirements

LPAs will be required to include the following materials in their applications:

1. A narrative description of the project. The project description must address the Minimum Criteria outlined below. In particular, the following items need to be addressed:
    a. What is the relationship between the type and number of crashes and the treatments proposed?
    b. Is the proposed treatment the most cost-effective method for mitigating the hazards at this location?
    c. What other types of treatments were considered and why were they rejected?
2. A completed Benefit/Cost ratio worksheet, as provided by the BMCMPO.
3. A data collection plan for pre/post treatment comparison. The data collection plan should clearly indicate the LPA's ability to evaluate the effectiveness of the project, using three years of pre-treatment data and three years of post-treatment data. The analysis should include a breakdown of the type and number of crashes in each of the six years, and the estimated benefits of the project, based on the number of crashes reduced in the three year post-treatment period. Standard crash cost estimates, available through federal sources, should be used as the source data. Crash data collection will be the responsibility of the LPA.
4. Preliminary cost estimates for each phase of the proposed project (e.g. PE, ROW, Construction, and Inspection Services), and a proposed timeline for completion of each phase.

Minimum Criteria for Project Selection

1. The project must be identified on the list of eligible projects, as provided by the BMCMPO.
2. The project must demonstrate a benefit/cost ratio greater than one, using the B/C worksheet provided. If the proposal consists largely of reactive strategies, applicants must demonstrate that the potential for rectifying the problem through low-cost, proactive strategies was thoroughly evaluated and provide a compelling explanation as to why reactive strategies were chosen. In most cases, this will involve completing a separate B/C worksheet for proactive measures alone.
3. The project must be independent of other improvements. HSIP funds may not be used for a safety component of a larger project (e.g., a guardrail in a bridge project, or pedestrian signals in an intersection upgrade).

Tentative Timeline for Distribution of Current HSIP Allocation

- August 22, 2008: Draft guidelines presented at TAC meeting; TAC votes to recommend approval.
- August 27, 2008: Draft guidelines presented at CAC meeting; CAC votes to recommend approval.
- September 12, 2008: Policy Committee adopts HSIP guidelines.
- September 22, 2008: BMCMPO issues call for projects, including a list of eligible project locations.
- November 3, 2008: Applications are due to BMCMPO staff.
- December 2008: BMCMPO issues public notice concerning proposed projects
- January, 2009: LPAs present projects to CAC and TAC.
- January, 2009: Policy Committee awards HSIP funding.

From: Forrest, Steve
To: Robinson, Scott;
CC:
Subject: New Business for this month"s MPO-CAC mtg.
Date: Monday, June 16, 2008 9:21:49 PM
Attachments:

Scott,

Here's a New Business agenda item for the June CAC meeting:

In my essay on Complete Streets I noted that the Vision Statement in the LRTP supported my interpretation of what a complete streets policy should entail.

At the last meeting, Buff Brown suggested that all transportation projects should be evaluated in terms of the vision statement. I believe he also suggested some kind of scoring or rating system to evaluate individual projects. I agree that this is important. It might take considerable effort to devise a scoring system, but would be worthwhile if it gave us some reasonably objective rating to prioritize projects, or to reject projects that do not score high enough.

WHEREAS, the Long Range Transportation Plan is the MPO's most comprehensive and far-reaching policy document; and

WHEREAS, the Vision Statement describes the "future transportation goals and objectives" for the BMC/MPO;

THERFORE, let us resolve to devise a rating system to ensure that the individual projects that we are presented with are in conformity with our long range vision.

At a previous meeting I referred to the "institutional inertia" of large bureaucracies (such as INDOT). In such bureaucracies there is a tendency to proceed with business-as-usual, even when there is a desire and a need for a new way of doing things. In order for our work to be effective in pursuing _our_ goals, it is necessary that we

review proposals in the light of our own stated goals. If we don't, then we will end up approving projects which are contrary to our goals; and if we act against our stated goals, then we might as well not exist as an organization.

-Steve Forrest, CAC member
submitted 6-16-08

Consistent with the planning requirements of the Transportation Equity Act for the 21st Century (TEA-21) and the input of community leaders and citizens on transportation policies and problems, future transportation goals and objectives were prepared to reflect a vision for the City of Bloomington, Monroe County, and the Town of Ellettsville. The Vision Statement highlights the need to:

- Develop a truly multi-modal system;
- Create a fully developed network of alternative transportation facilities;
- Reduce the number and length of auto trips;
- Achieve a better relationship between land uses to reduce auto dependency;
- Achieve the widest possible range of alternatives to the automobile;
- Make transportation investments that are consistent with comprehensive plans;
- Make transportation investments that protect the environment, promote energy conservation, and improve quality of life;
- Increase safety for all users of the transportation system;
- Support economic vitality through strategic transportation investments;
- Improve the movement of goods through the transportation system;
- Promote fiscally sound transportation investments and maximize financial resources; and
- Preserve existing transportation investments through operational improvements.